

FIG. 1

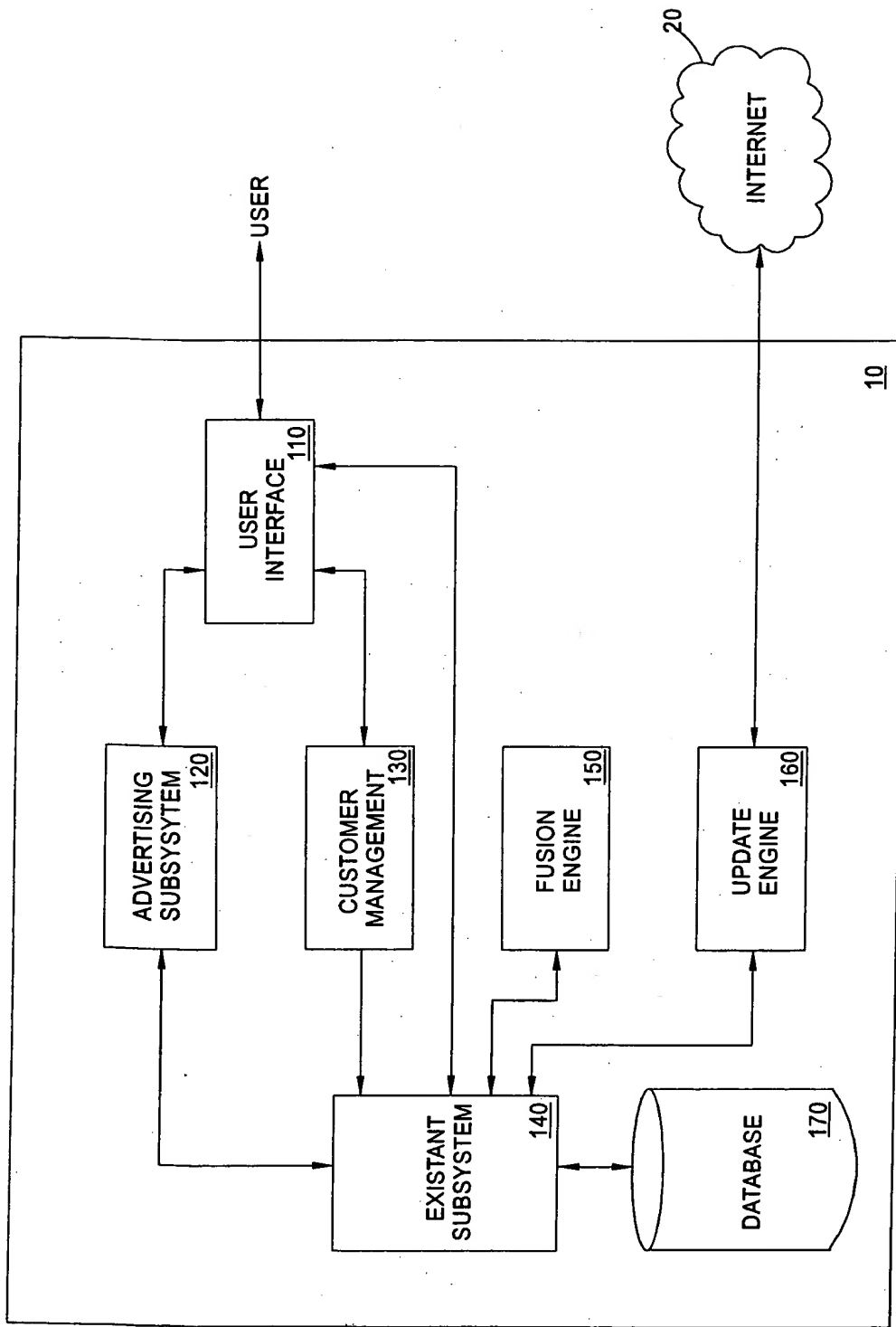


FIG. 2

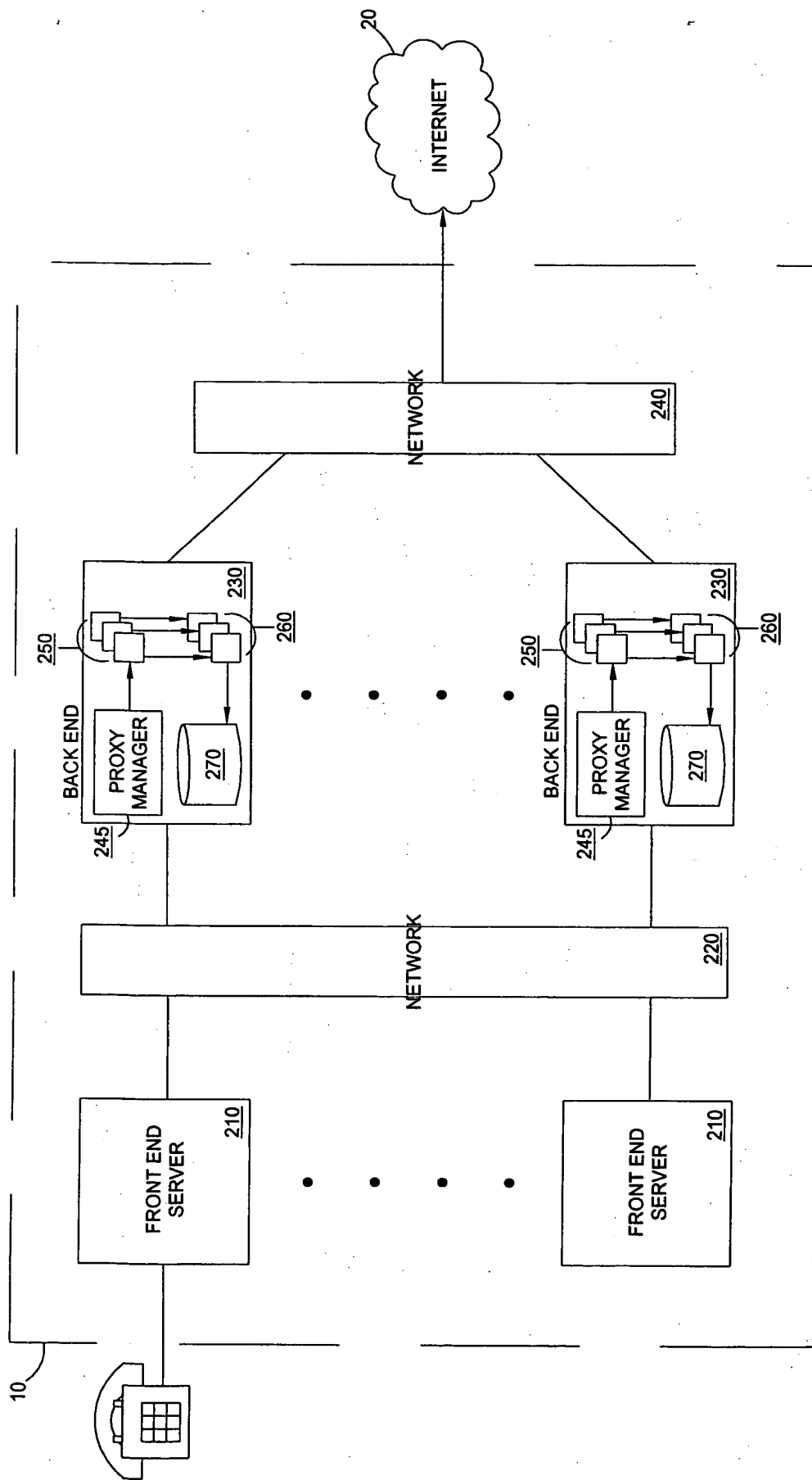


FIG. 3

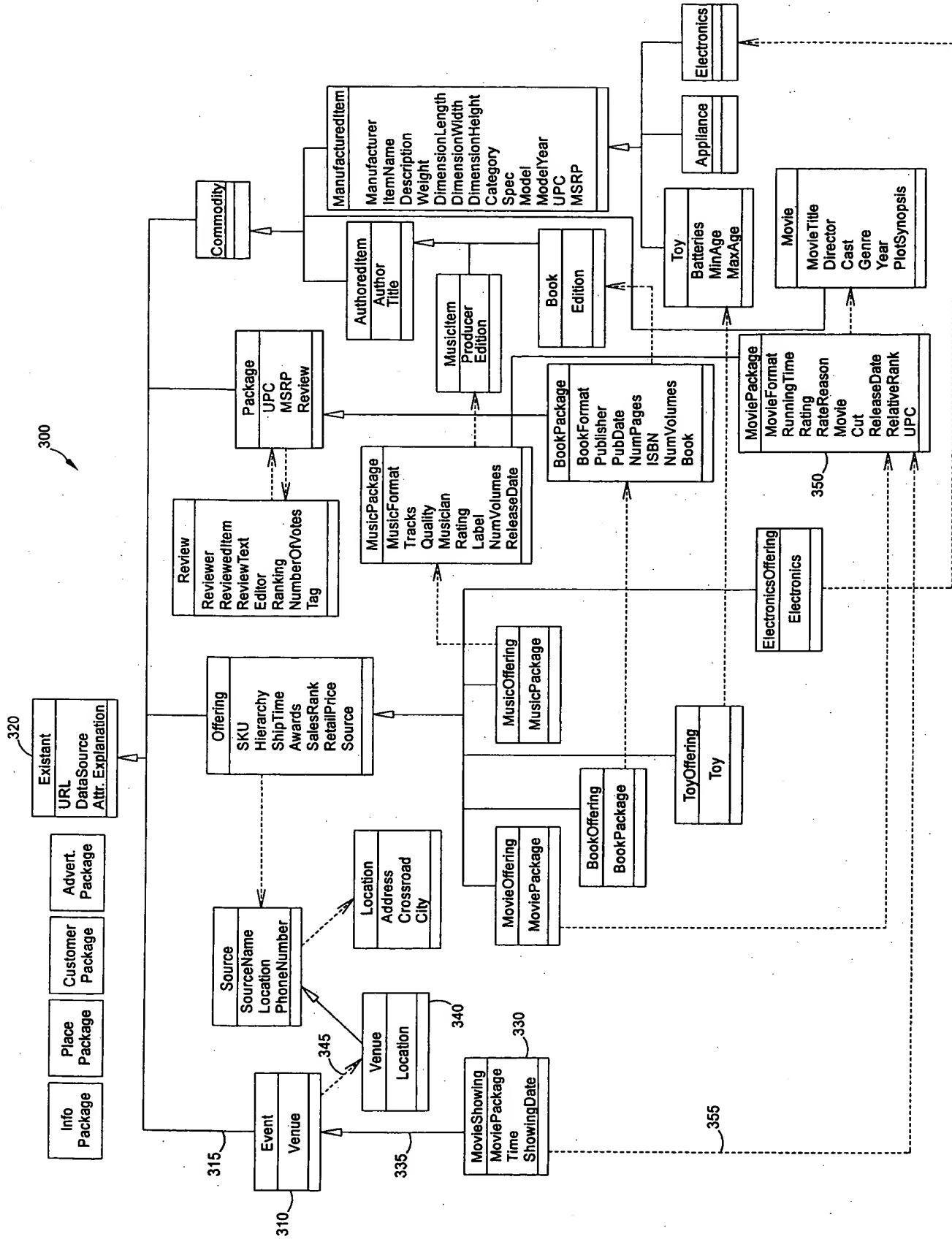


FIG. 4

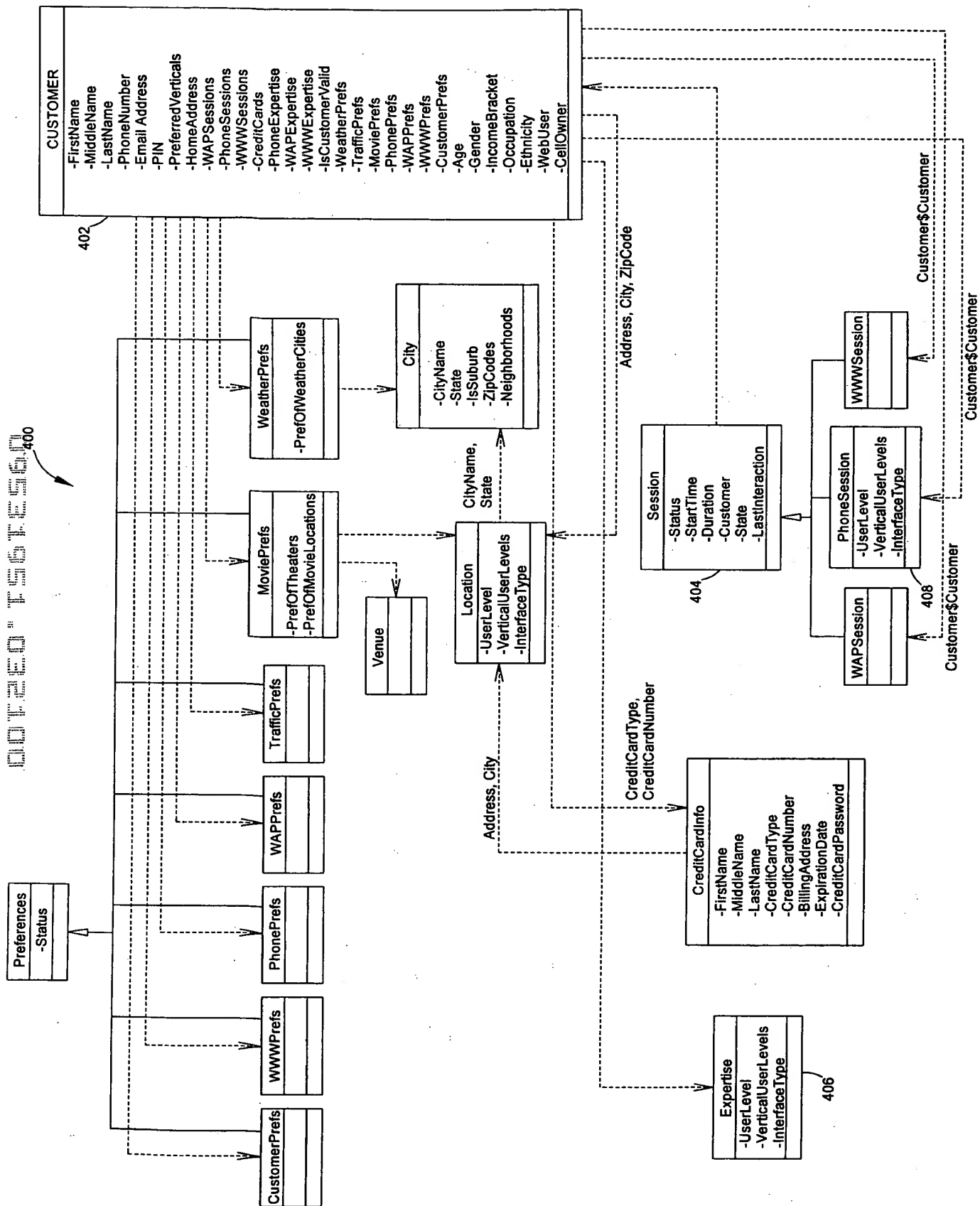
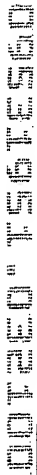


FIG. 5



Abstract

Figure 1 consists of 12 bar charts, labeled (a) through (l), each representing a different demographic or lifestyle category. The y-axis for all charts is 'Percentage of Total Sample' ranging from 0 to 100. The x-axis for all charts represents 'Age Group' with categories: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75+.

- (a) Gender:** Male (blue), Female (orange).
- (b) Marital Status:** Single (blue), Married (orange), Divorced (green), Widowed (red).
- (c) Education:** High School (blue), College (orange), Graduate School (green).
- (d) Employment:** Full-time (blue), Part-time (orange), Unemployed (green), Retired (red).
- (e) Income:** \$0-\$10k (blue), \$10k-\$20k (orange), \$20k-\$30k (green), \$30k-\$40k (red), \$40k-\$50k (purple), \$50k-\$60k (brown), \$60k-\$70k (pink), \$70k-\$80k (gray), \$80k-\$90k (light blue), \$90k-\$100k (light orange).
- (f) Religion:** Christianity (blue), Islam (orange), Hinduism (green), Buddhism (red), Judaism (purple), Sikhism (brown), Other (pink).
- (g) Ethnicity:** White (blue), Black (orange), Asian (green), Hispanic (red), Native American (purple), Pacific Islander (brown), Other (pink).
- (h) Political Affiliation:** Democrat (blue), Republican (orange), Independent (green), Other (red).
- (i) Health Status:** Excellent (blue), Good (orange), Fair (green), Poor (red).
- (j) Housing:** Own (blue), Rent (orange), Other (green).
- (k) Transportation:** Car (blue), Public Transit (orange), Bicycle (green), Walk (red), Other (purple).
- (l) Recreation:** Sports (blue), Reading (orange), Gardening (green), Traveling (red), Other (purple).

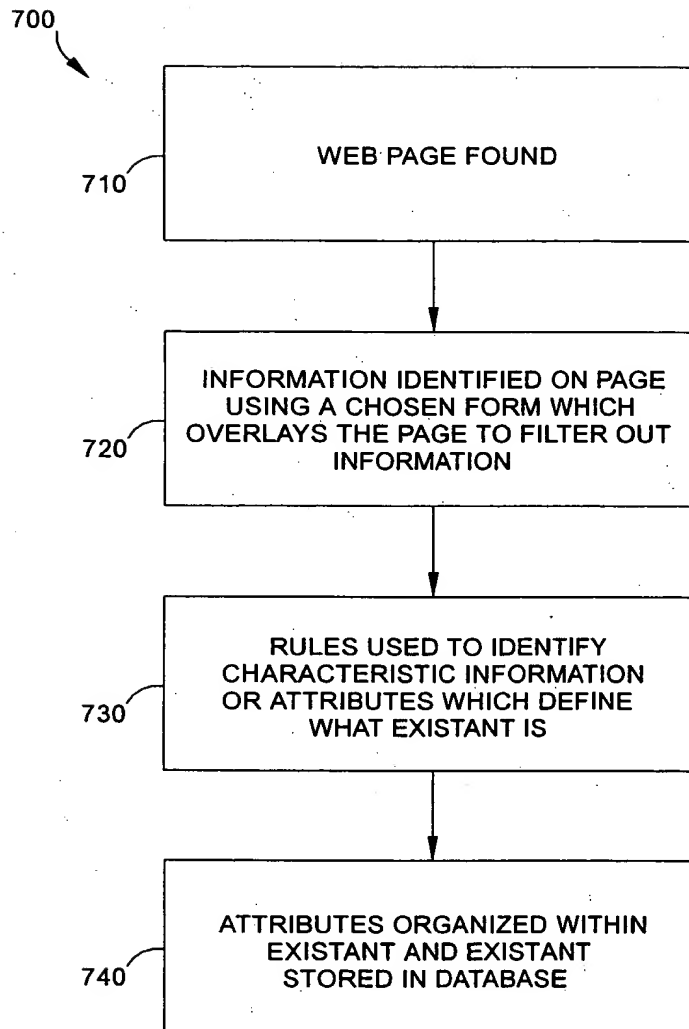


FIG. 7

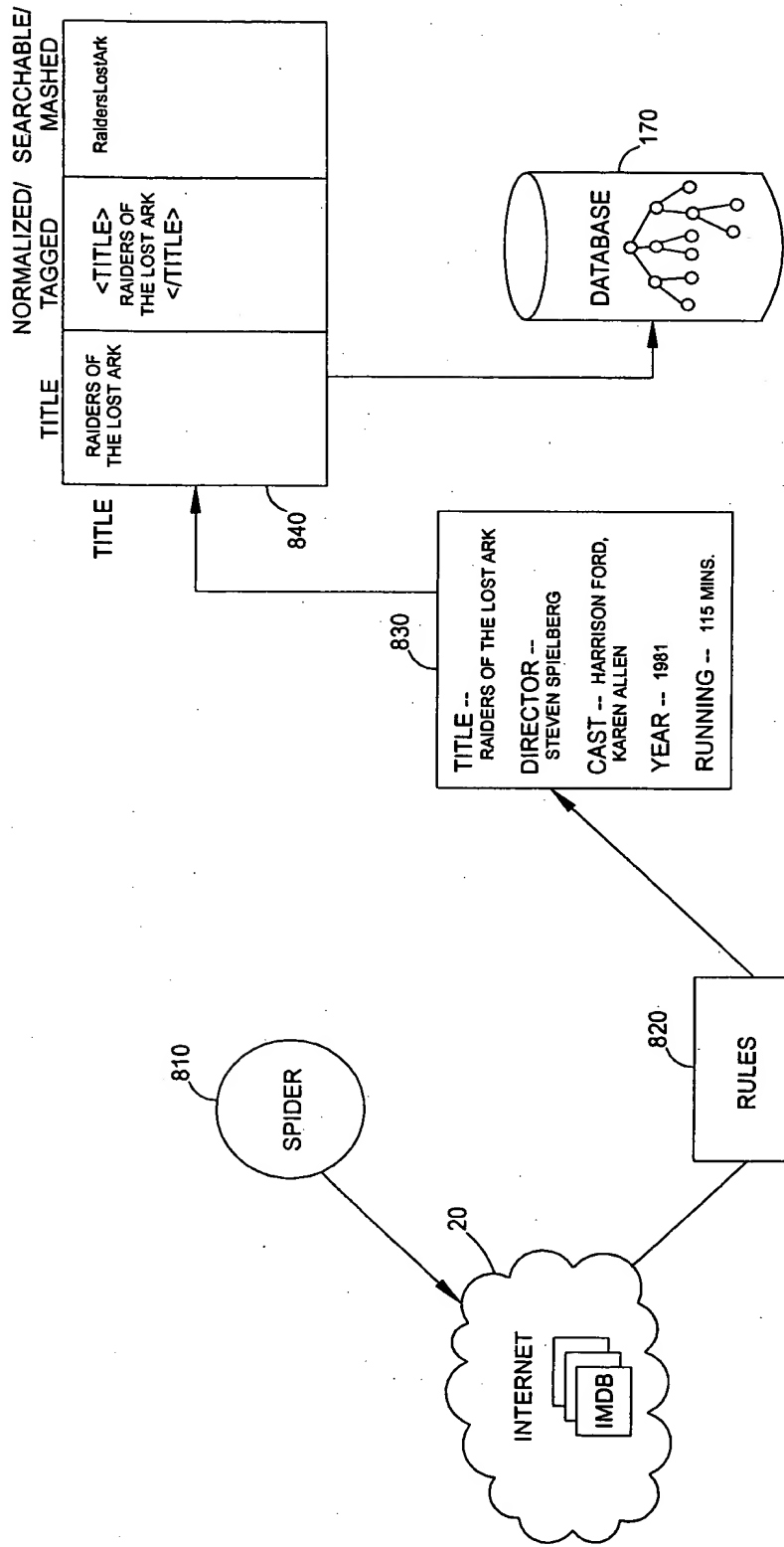


FIG. 8

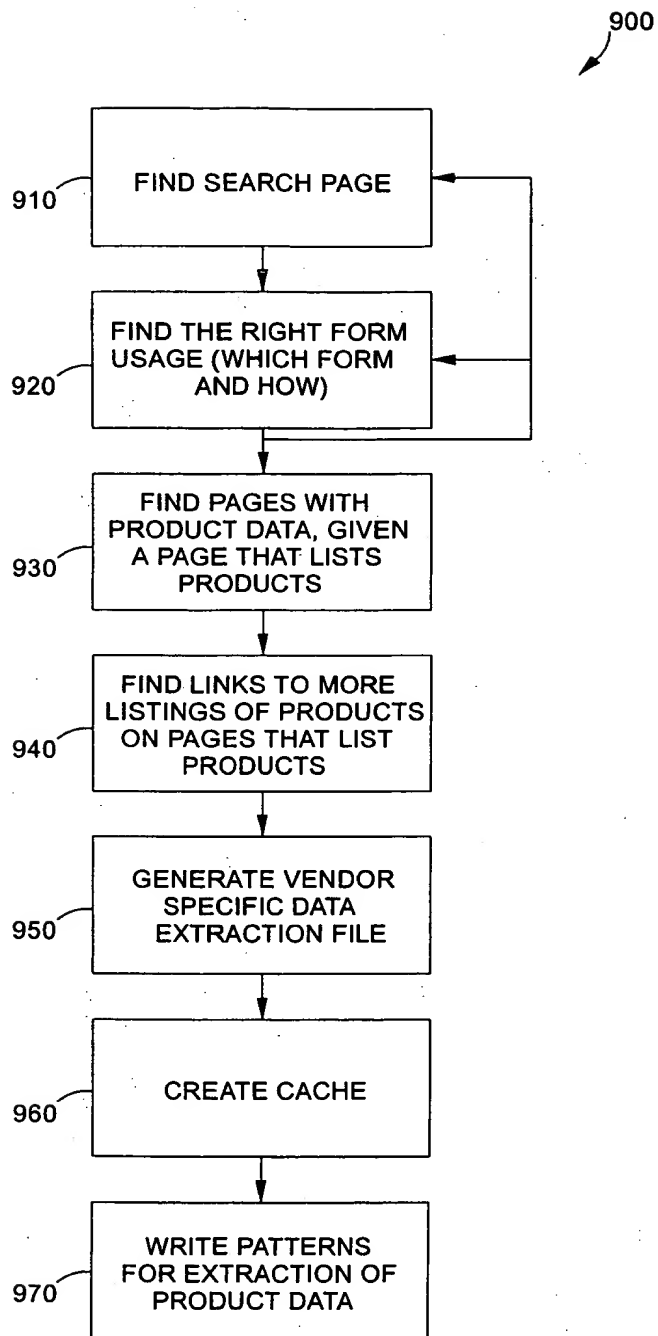


FIG. 9

Figure 1 is a block diagram of a system architecture. At the top, three cylinders labeled 1040, 1035, and 1030 are connected to a horizontal line labeled 1020. Below this line, three boxes labeled 1045, 1050, and 1055 are connected to the line. Each box contains a 10x10 grid of binary digits. A dashed line connects the right side of box 1055 to a box labeled 1025, which contains the text "DATA ORGANIZING TOOL". Below box 1025 is a box labeled 1010, which contains the text "RULE WRITERS". A dashed line connects the bottom of box 1025 to box 1010. Below box 1050 is a large box labeled 1060, which contains a 10x10 grid of binary digits. Below box 1060 is a cylinder labeled 1070.

FIG. 10

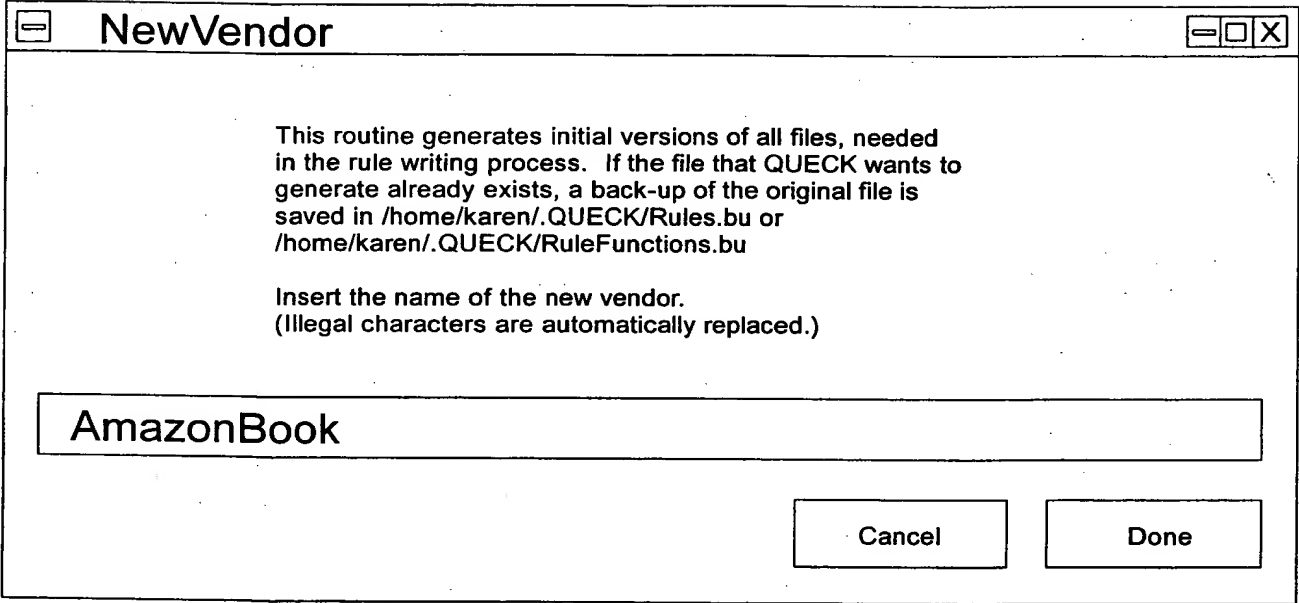
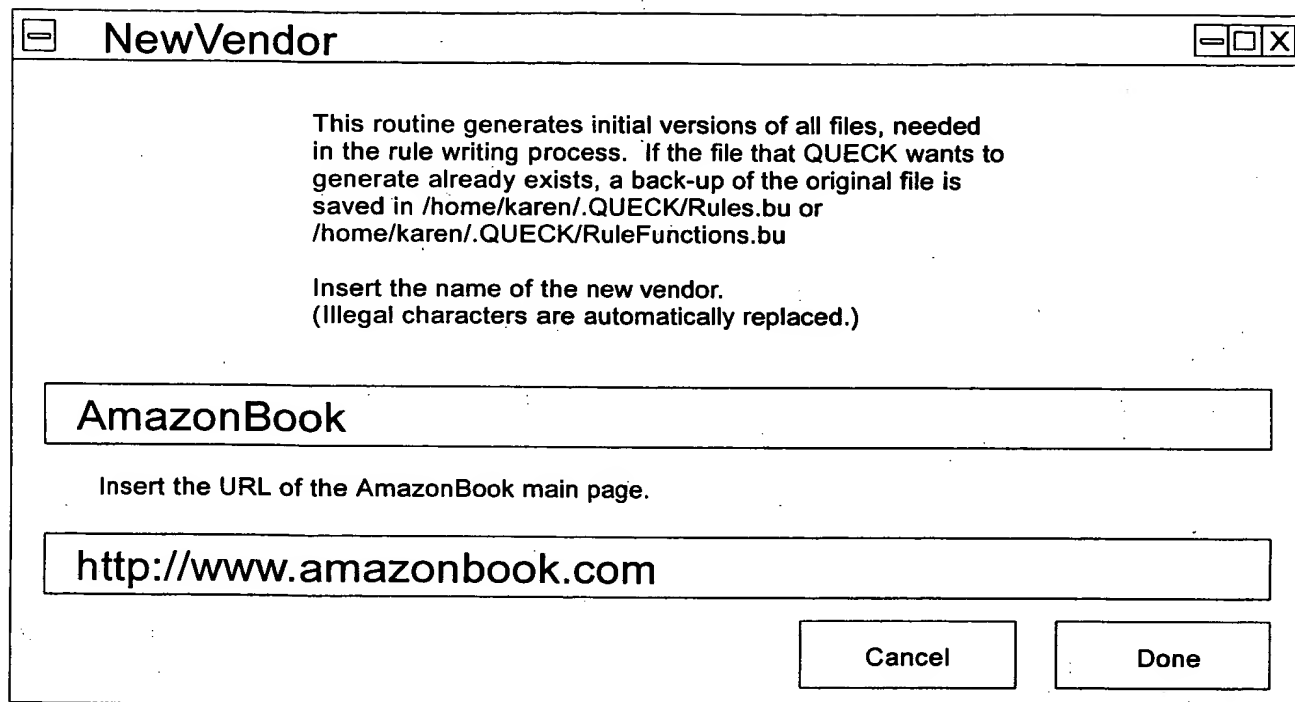
[illegible]

FIG. 12

1300



NewVendor

This routine generates initial versions of all files, needed in the rule writing process. If the file that QUECK wants to generate already exists, a back-up of the original file is saved in /home/karen/.QUECK/Rules.bu or /home/karen/.QUECK/RuleFunctions.bu

Insert the name of the new vendor.
(Illegal characters are automatically replaced.)

AmazonBook

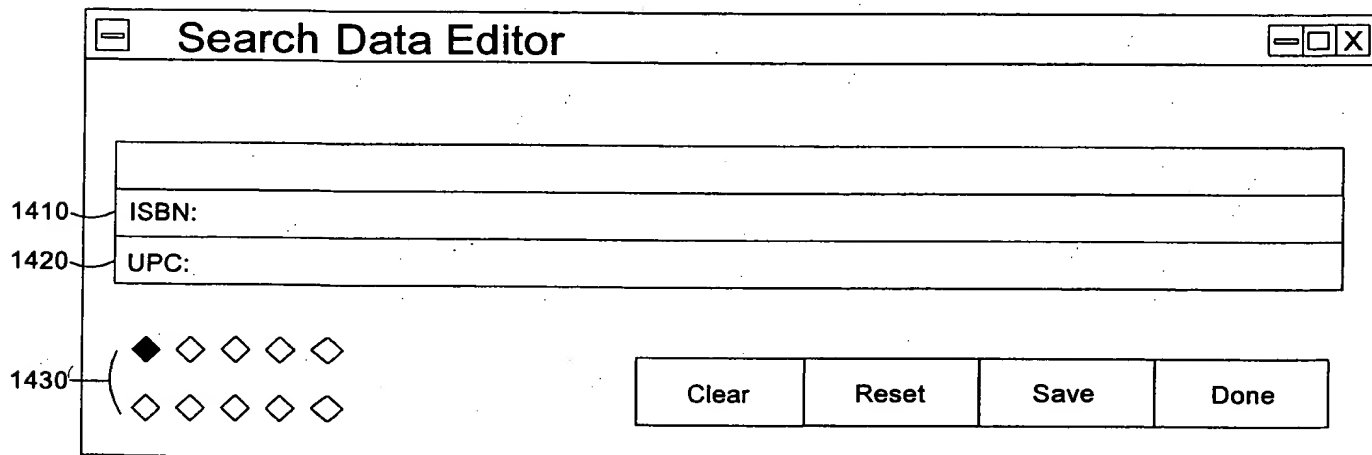
Insert the URL of the AmazonBook main page.

<http://www.amazonbook.com>

Cancel Done

FIG. 13

1400



Search Data Editor

1410 ISBN:

1420 UPC:

1430

◆ ◇ ◇ ◇ ◇
◇ ◇ ◇ ◇ ◇

Clear Reset Save Done

FIG. 14

1500

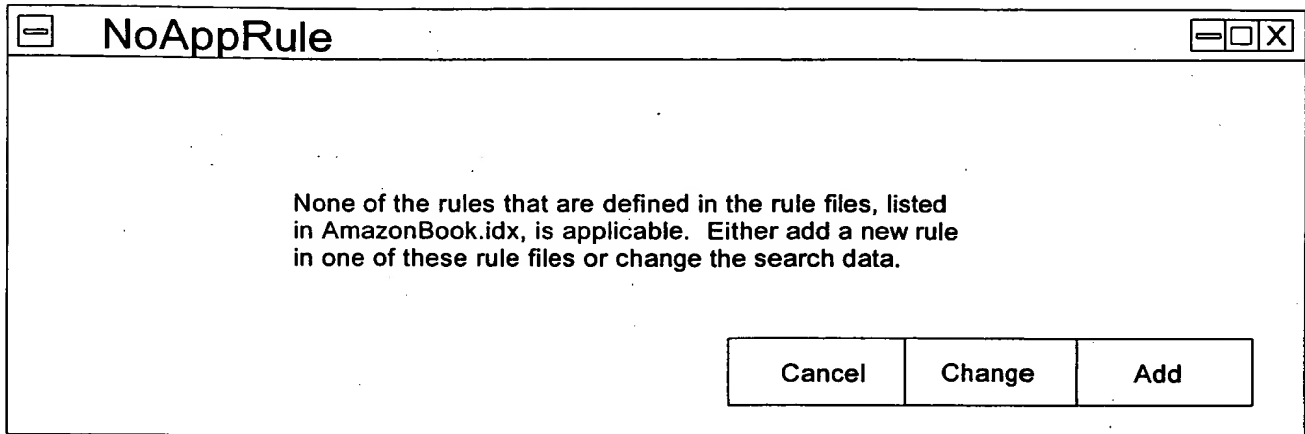


FIG. 15

1600

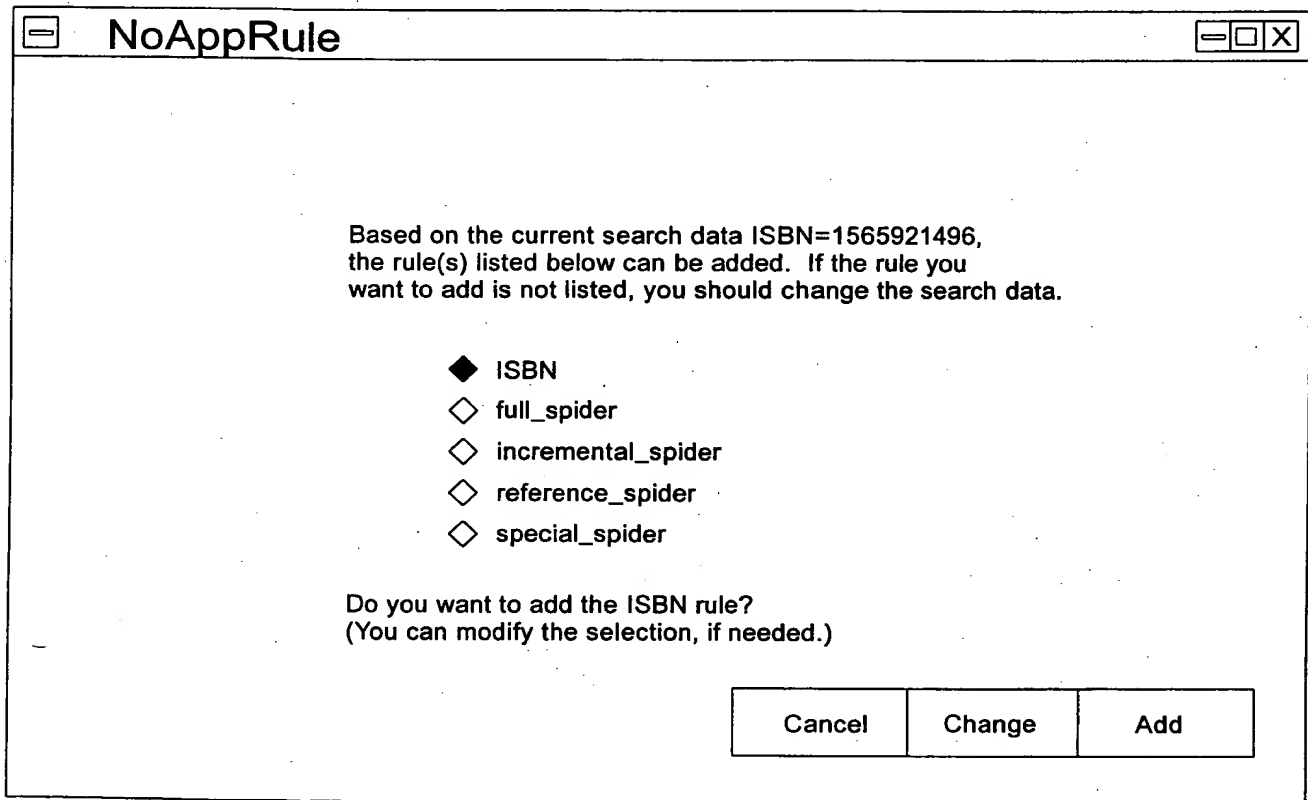


FIG. 16

1700

UriDialog

The homepage of AmazonBook is now loaded into your Netscape browser.

Browse to the web page that should be associated to the ISBN rule.
This must be a web page with facilities for an ISBN search.
The best choice is usually the web page with the most advanced searching facilities for ISBN.

Press "Done" when loading this search page into your Netscape browser is completed.

Cancel Again Done

FIG. 17

1800

VendorFormOptions

The form currently analysed by QUECK contains one or more choice mechanisms.
Select below which choices should be used in the script of ISBN.

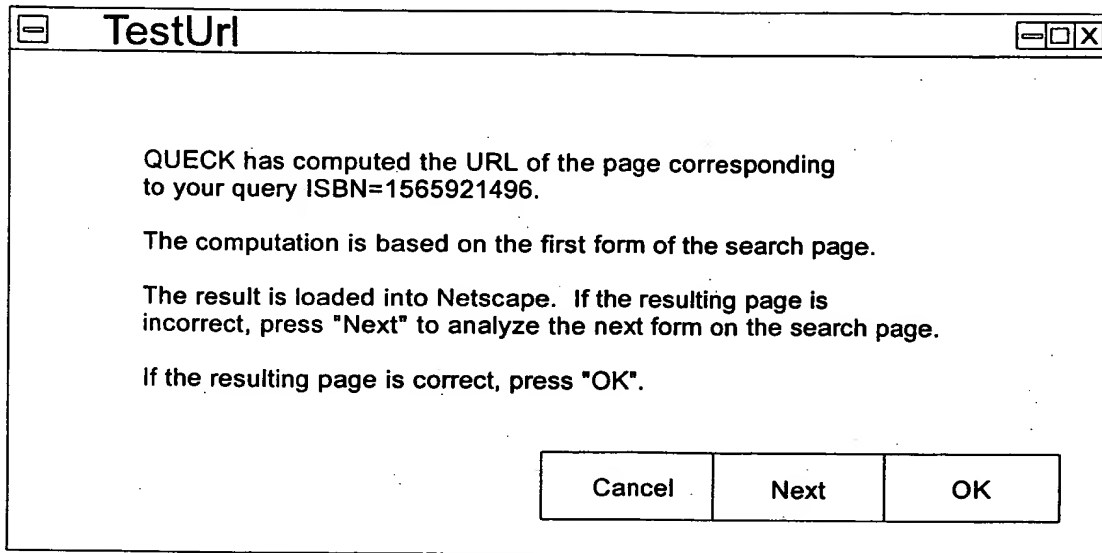
Choice mechanism 1 (selection menu)

- ◆ Books
- ◇ All Products

Cancel Again Done

FIG. 18

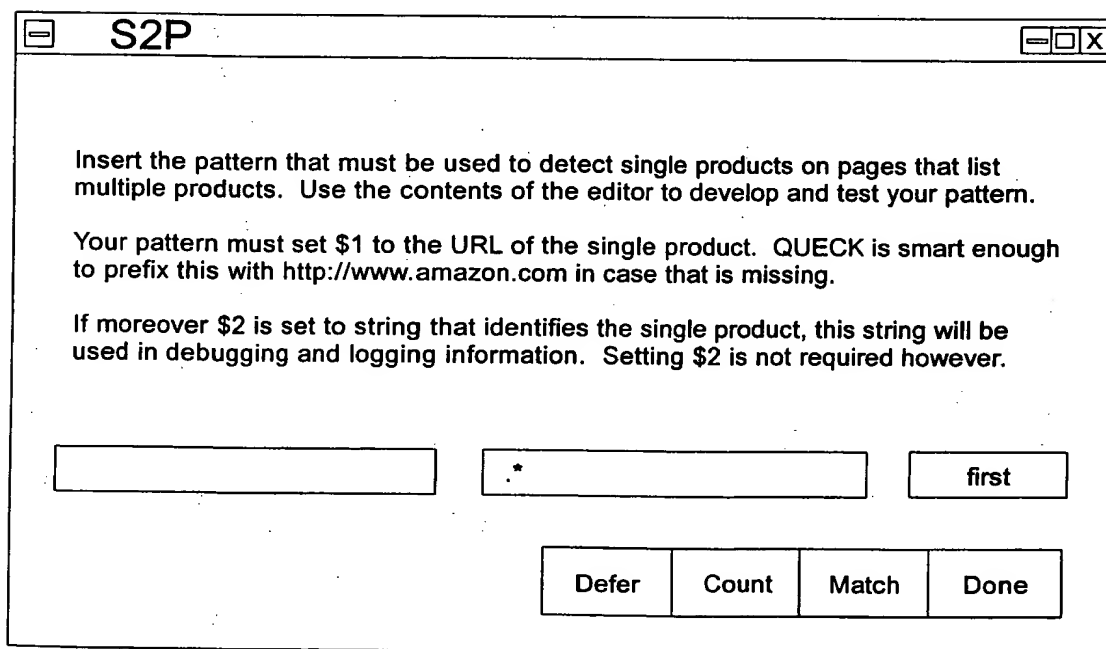
1900



A dialog box titled "TestUrl" with a standard Windows-style title bar (minimize, maximize, close buttons). The text inside reads: "QUECK has computed the URL of the page corresponding to your query ISBN=1565921496. The computation is based on the first form of the search page. The result is loaded into Netscape. If the resulting page is incorrect, press 'Next' to analyze the next form on the search page. If the resulting page is correct, press 'OK'." At the bottom right, there are three buttons: "Cancel", "Next", and "OK".

FIG. 19

2000



A dialog box titled "S2P" with a standard Windows-style title bar. The text inside reads: "Insert the pattern that must be used to detect single products on pages that list multiple products. Use the contents of the editor to develop and test your pattern. Your pattern must set \$1 to the URL of the single product. QUECK is smart enough to prefix this with http://www.amazon.com in case that is missing. If moreover \$2 is set to string that identifies the single product, this string will be used in debugging and logging information. Setting \$2 is not required however." Below the text, there are three input fields: a text box, a box containing a single asterisk (*), and a box containing the word "first". At the bottom right, there are four buttons: "Defer", "Count", "Match", and "Done".

FIG. 20

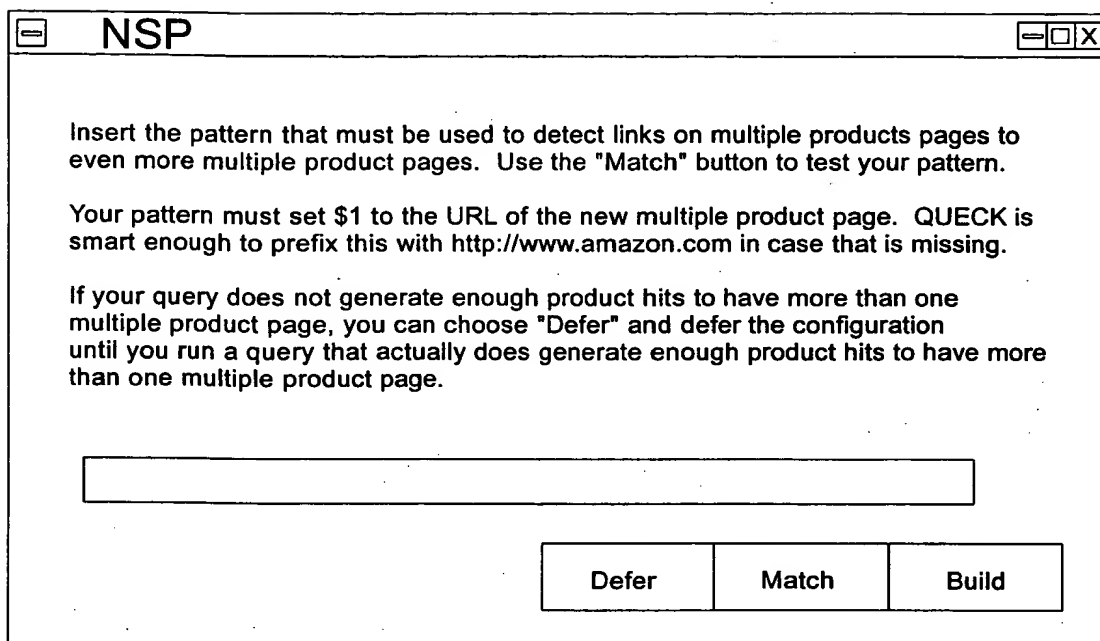


FIG. 21

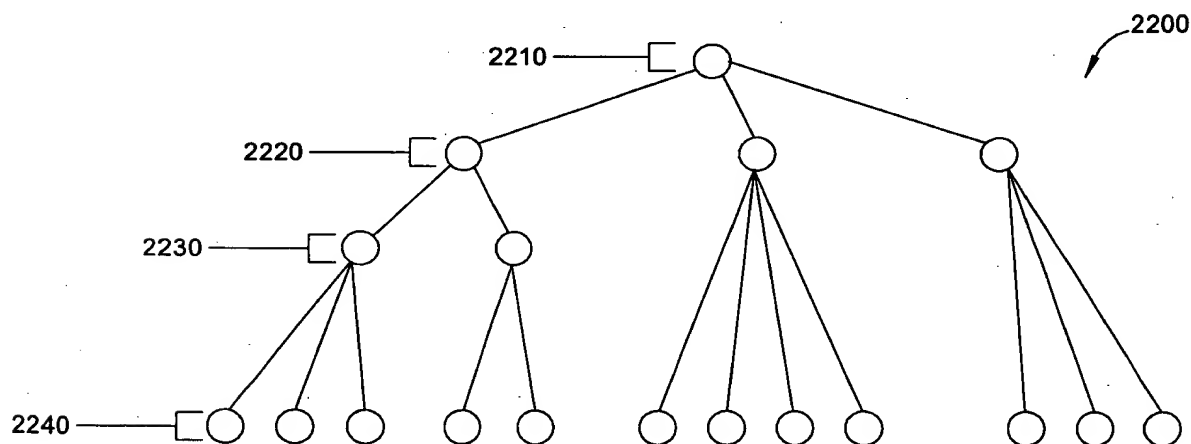


FIG. 22

2300

Insert here the URL of the page, currently loaded into Netscape. This is the page associated to the full_spider rule.

Next, set "SpiderDepth" to the maximum number of links that has to be followed from the top of the hierarchy to the actual product pages. Note that in some cases this number depends on the branch you follow. Setting "SpiderDepth" too low creates a spider that misses products that are nested too deep in the hierarchy. Setting "SpiderDepth" too high leads to a decrease in performance.

SpiderDepth

1

UpperBound

0

FIG. 23

2400

<http://www.amazon.com/exec/obidos/subst/home/home.html/002-5797861-2625002>

The spider you specified is a level - 1 spider.
This means that your spider has the following form:

level - 0: The top page (accessed via the URL above)
level - 1: The single product pages to be spidered

Insert below the pattern used to detect level - 1 pages on the top page.

Your pattern must set \$1 to the URLs of the child pages. QUECK is smart enough to prefix this URL with http://www.amazon.com in case it is missing. If your pattern also sets \$2, that value will be used in the hierarchy attributes.

first

1st Level

.*

FIG. 24

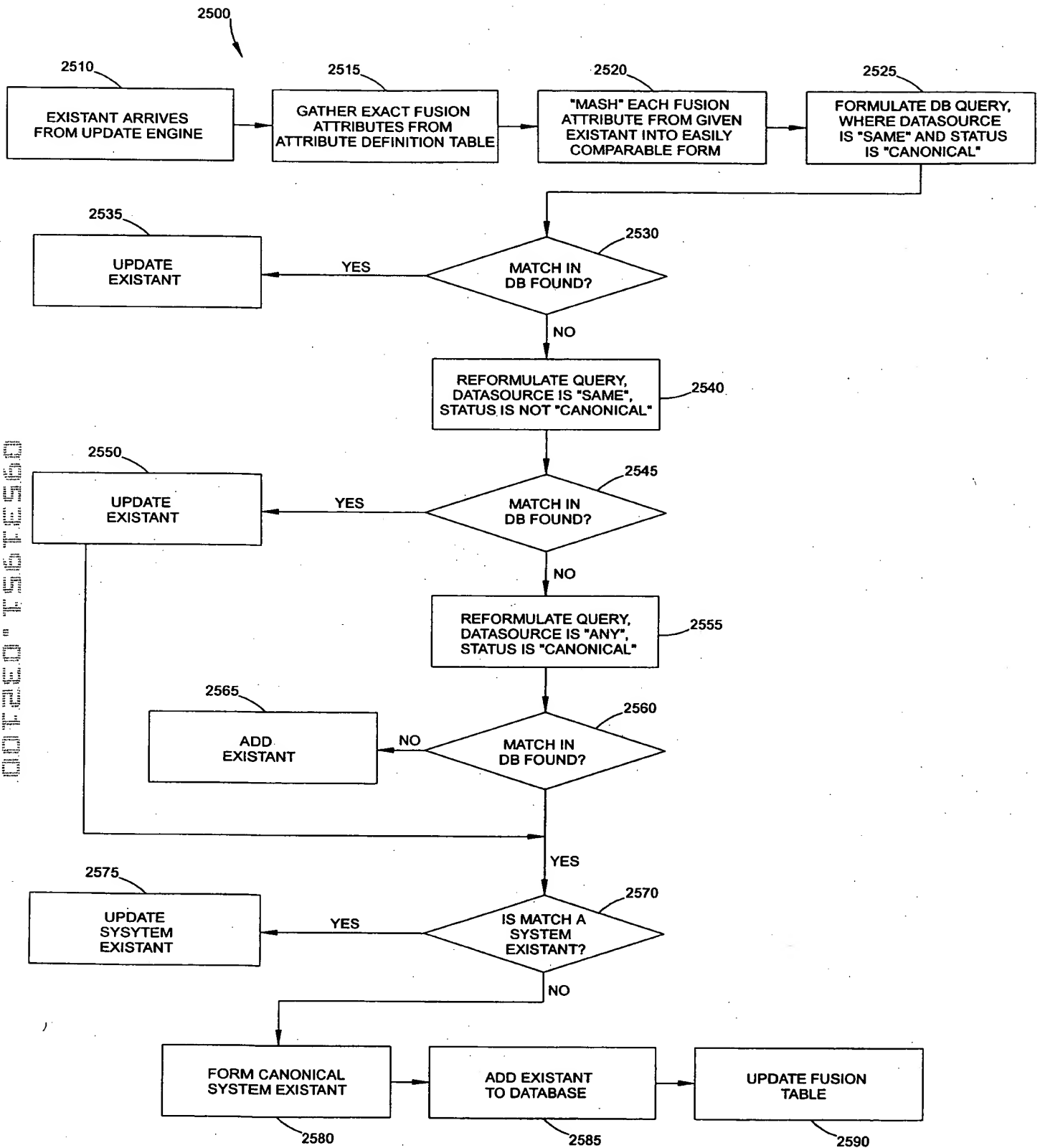


FIG. 25

```

graph TD
    2600[2600] --> 2610[2610: READ ATTRIBUTES  
DEFINITION TABLE]
    2610 --> 2615[2615: READ FUSION  
CONTROL LANGUAGE  
FILE FOR EACH  
EXISTANT TYPE  
REQUIRING  
ADVANCED FUSION]
    2615 --> 2620[2620: COMPILE FUSION  
FILES INTO  
INTERMEDIATE  
COMPUTER CODE]
    2620 --> 2625[2625: LOAD PREVIOUSLY  
FUSED EXISTANTS  
INTO MEMORY]
    2625 --> 2630[2630: COLLECT ATTRIBUTES  
INTO EQUIVALENCE  
SETS]
    2630 --> 2640[2640: INDEX VALUES]
    2640 --> 2635{2635: IS ATTRIBUTE  
TEXTUAL?}
    2635 -- NO --> 2640
    2635 -- YES --> 2645[2645: INDEX SUBSTRING  
OCCURANCES]
    2645 --> 2650{2650: IS TEXT  
STRUCTURED?}
    2650 -- NO --> 2670[2670: EXECUTE VALIDITY  
CHECKS TO VERIFY  
INTEGRITY OF DB]
    2650 -- YES --> 2655[2655: IDENTIFY LOCATION  
AND ISOLATE  
STRUCTURED  
SEGMENT]
    2655 --> 2660[2660: PARSE ISOLATED  
PARTS AND IDENTIFY  
SEMANTIC  
INFORMATION]
    2660 --> 2665[2665: INDEX SEMANTIC  
INFORMATION]
    2665 --> 2670
    2670 --> 2675[2675: GET EXISTANT  
TO BE FUSED]
    2675 --> 2680[2680: ACTIVATE FUSION  
CRITERIA AND  
MATCHING PROGRAMS  
FOR CORRESPONDING  
EXISTANT TYPE]
    2680 --> 2685[2685: EXECUTE FIRST  
FUSION RULE AND  
RETURN ALL  
MATCHES]
    2685 --> 2690{2690: ACCEPTABLE  
MATCH FOUND?}
    2690 -- YES --> 2697[2697: FUSE EXISTANTS  
TOGETHER]
    2690 -- NO --> 2691[2691: EXECUTE NEXT  
FUSION RULE AND  
RETURN  
ALL MATCHES]
    2691 --> 2692{2692: ACCEPTABLE  
MATCH FOUND?}
    2692 -- YES --> 2698[2698: DEFER TO HUMAN  
EXAMINATION]
    2692 -- NO --> 2693{2693: LAST RULE  
TESTED?}
    2693 -- YES --> 2694{2694: STRONG  
PARTIAL MATCH?}
    2693 -- NO --> 2691
    2694 -- YES --> 2698
    2694 -- NO --> 2695[2695: REJECT  
FUSION]
    2695 --> 2699[2699: CREATE NEW  
EXISTANT]
    2699 --> REJECT[REJECT]
    2697 --> ACCEPT[ACCEPT]
    2698 --> DEFER[DEFER]

```

FIG. 26

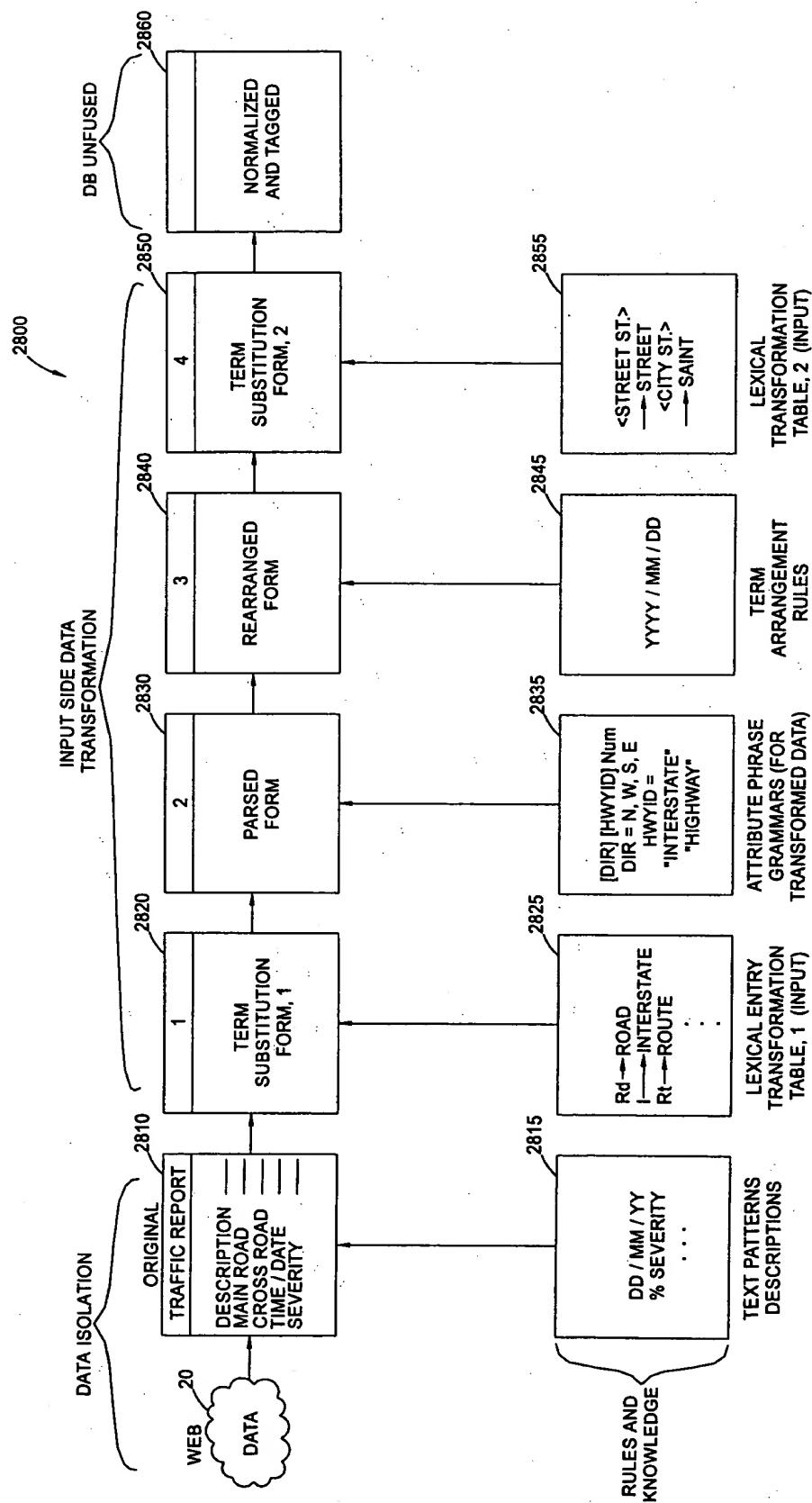


FIG. 28

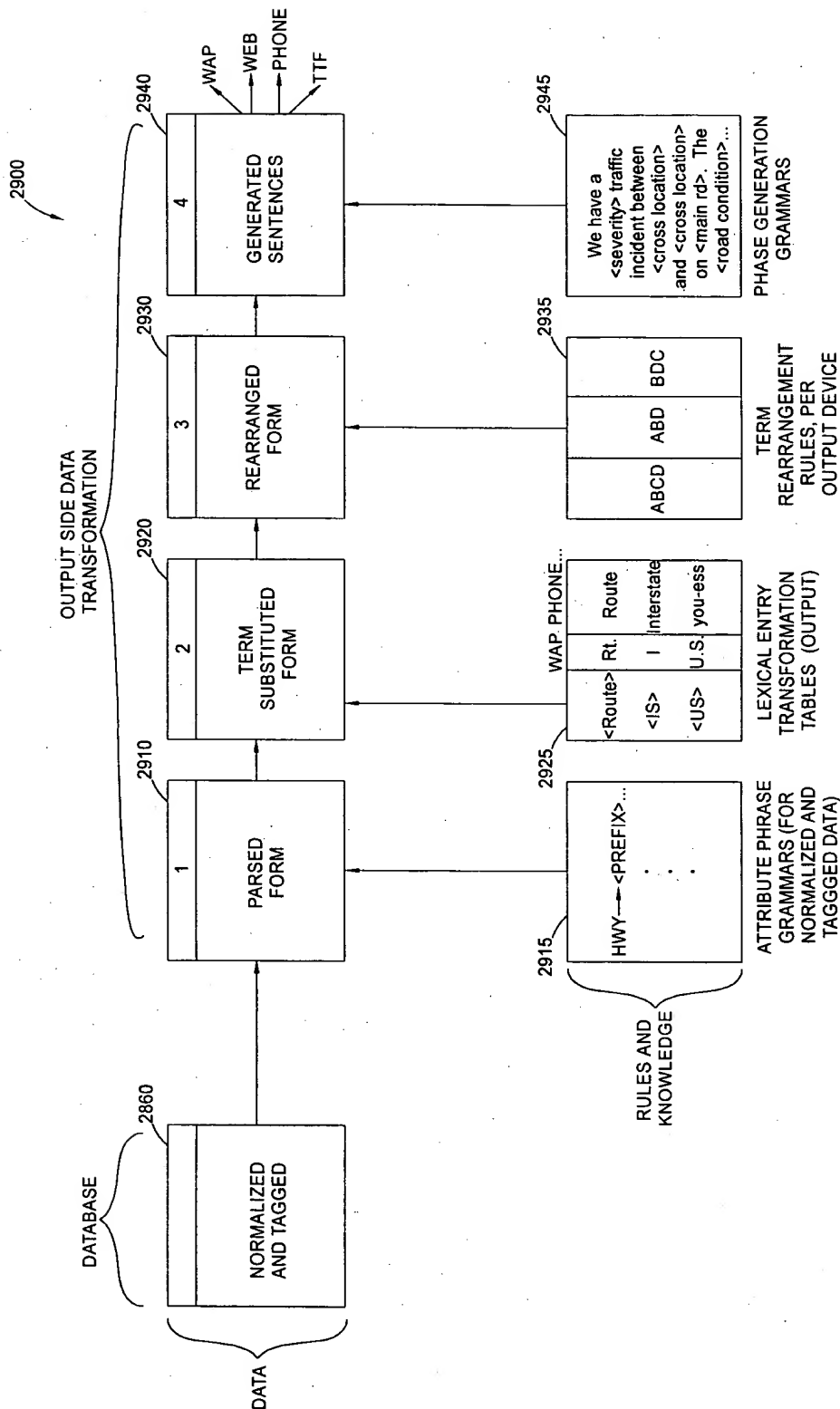


FIG. 29

```

graph TD
    Start([Phone Icon]) --> 10[VOICE PORTAL]
    10 --> 3010[ORIENTATION AND USER IDENTIFICATION  
AlphaNumeric 3010]
    3010 --> 3020[TOP LEVEL  
GET VERTICAL DOMAIN 3020]
    3020 <--> CDB[(CUSTOMER DATABASE)]
    3020 <--> EDB1[(EXISTANT DATABASE 170)]
    3020 -- VERTICAL --> 3030[TOP LEVEL OF VERTICAL X 3030]
    3030 --> 3040[IDENTIFY UNIQUE EXISTANT SUBSYSTEM 3040]
    3040 <--> EDB2[(EXISTANT DATABASE 170)]
    3040 --> 3050{EXISTANT FOUND? 3050}
    3050 -- YES --> 3060[FOUND EXISTANT SUBSYSTEM 3060]
    3050 -- NO --> WWW[WWW QUERY]
    WWW --> 3030
    3060 -- GO TO 3040 --> 3040
    3060 -- GO TO 3030 --> 3030
    3060 -- GO TO 3020 --> 3020
  
```

FIG. 30

09531951-032100

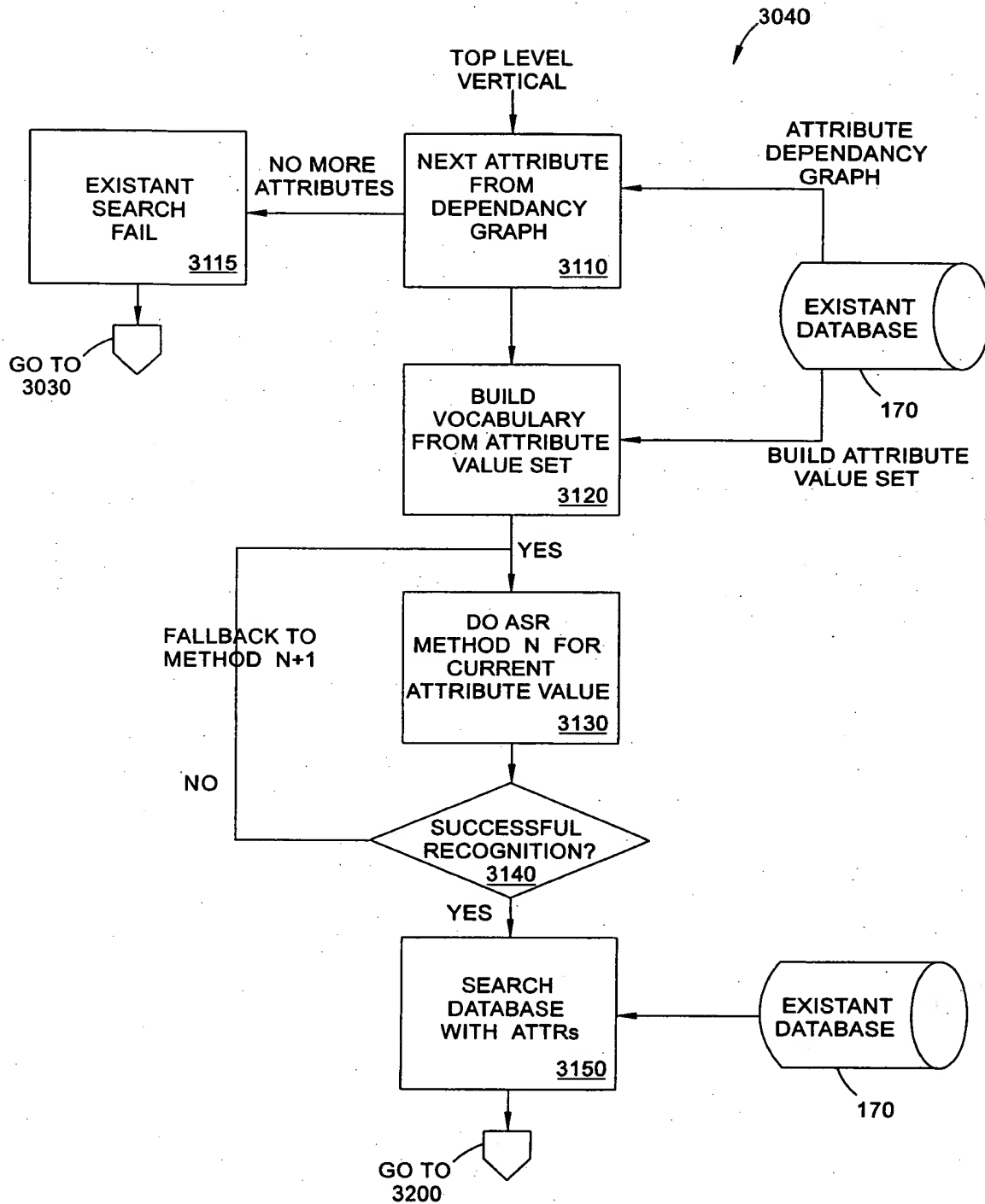


FIG. 31

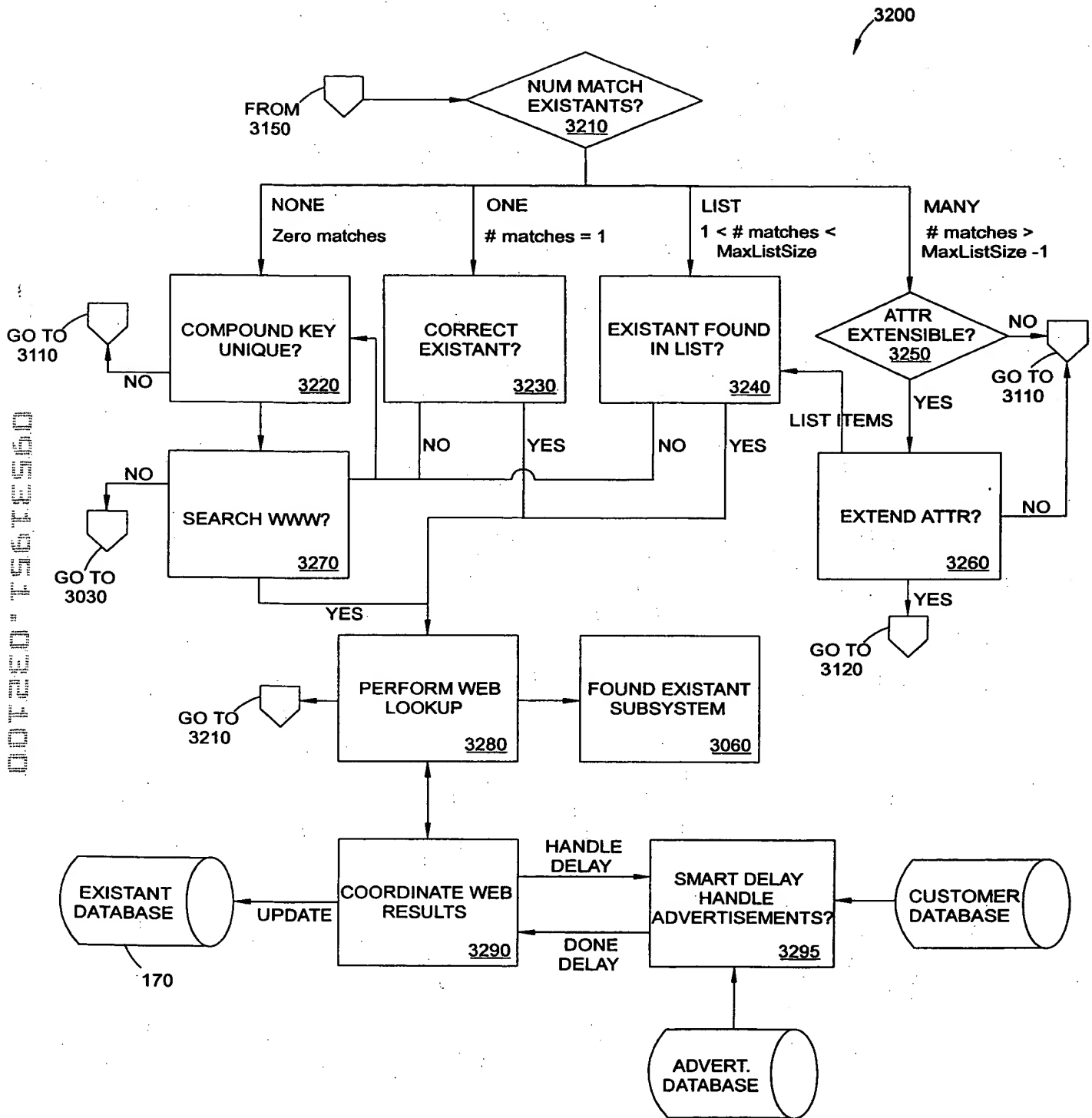


FIG. 32

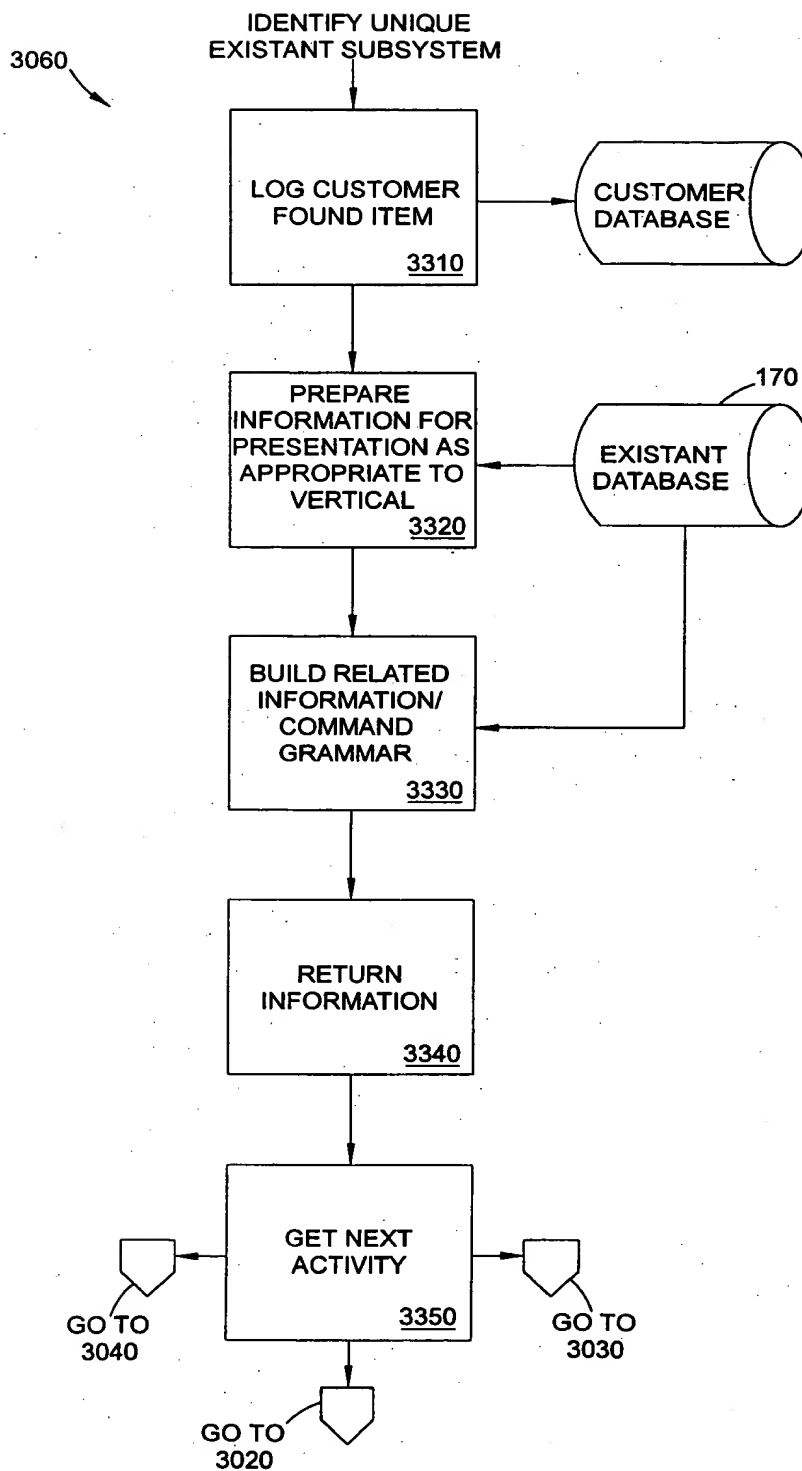


FIG. 33

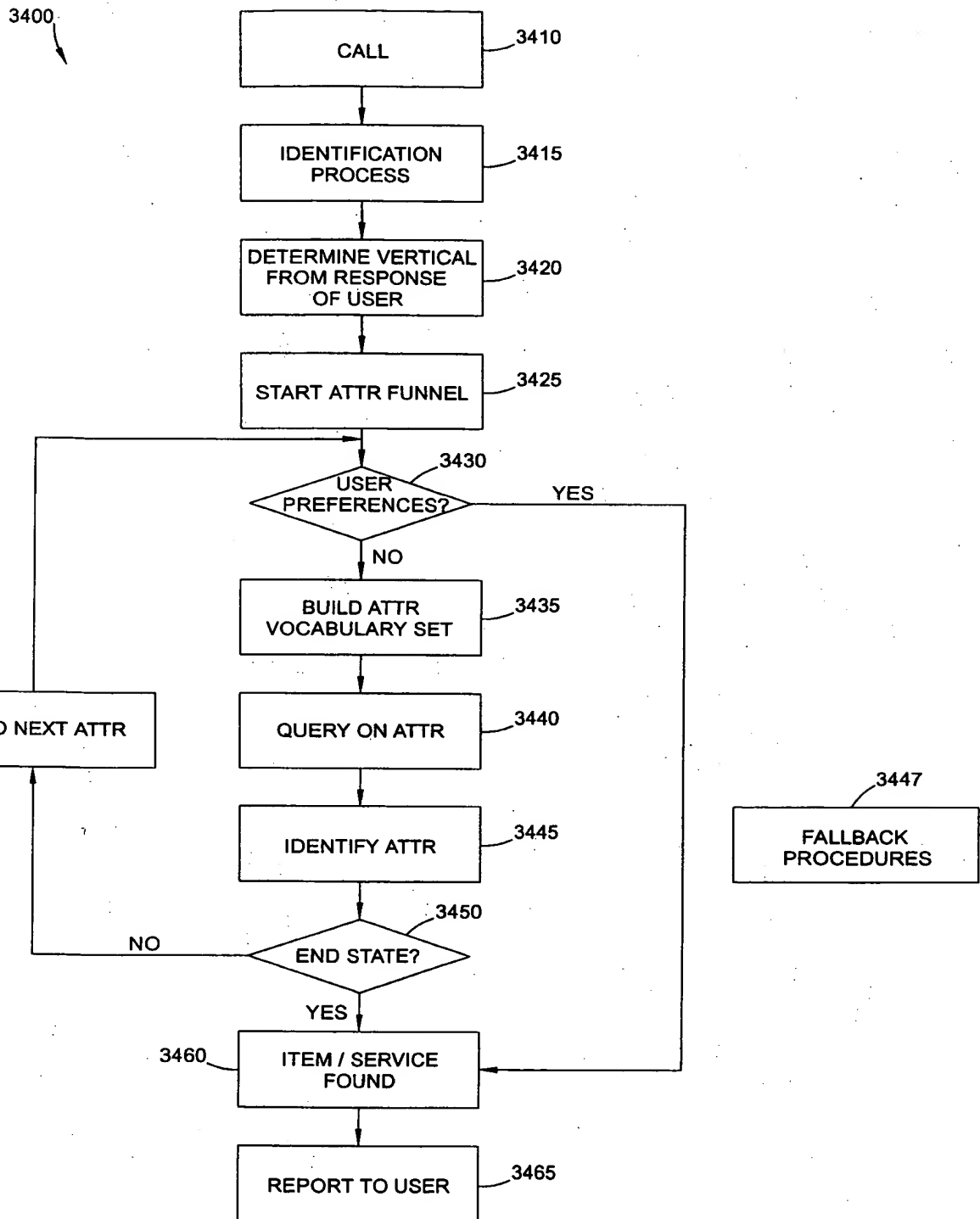


FIG. 34

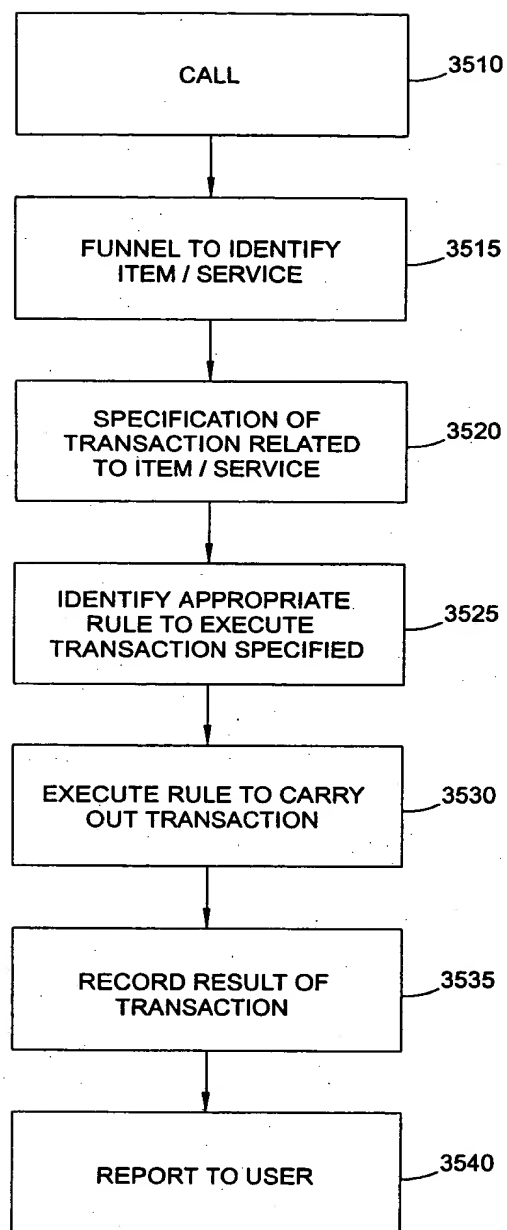


FIG. 35

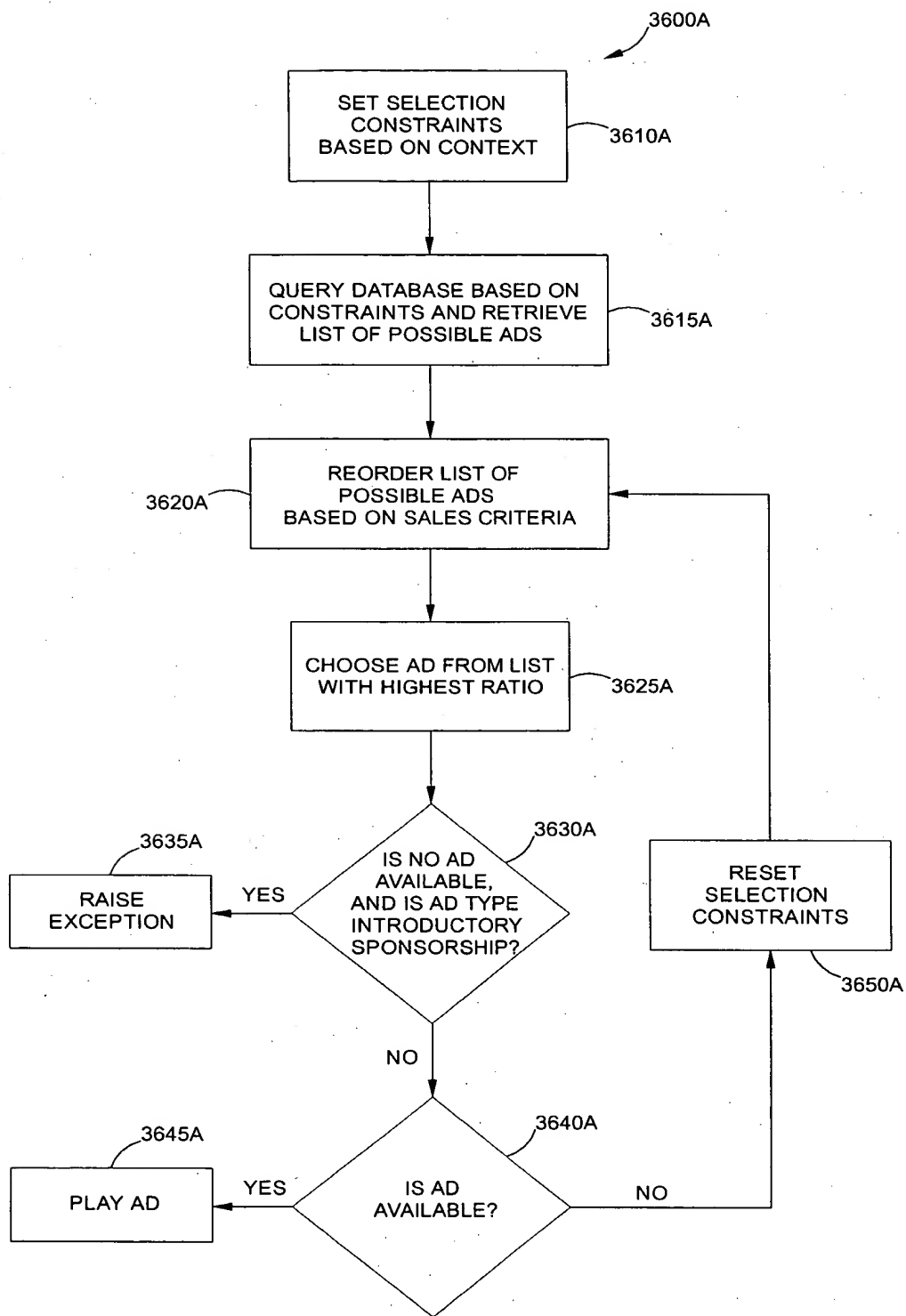


FIG. 36A

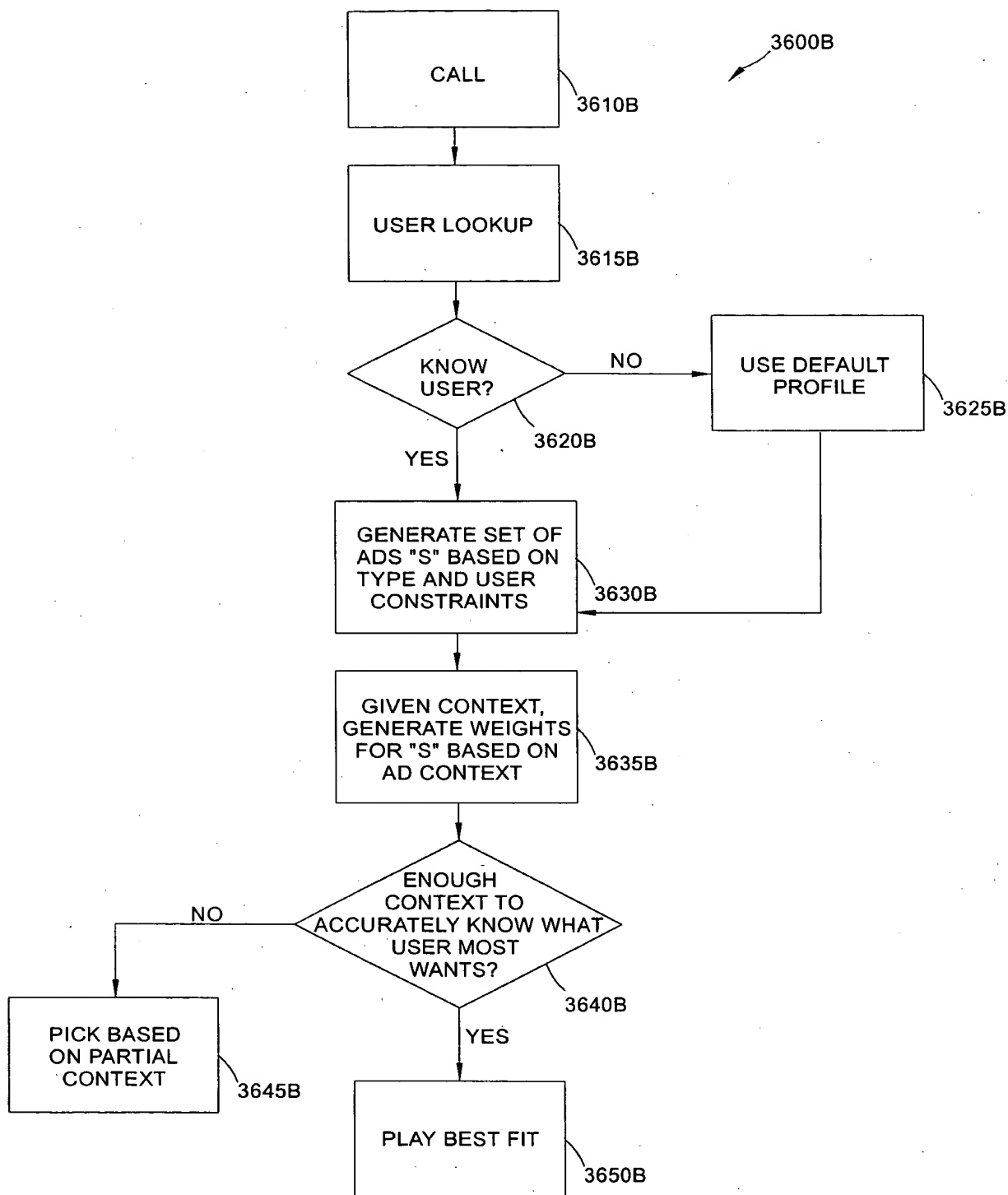


FIG. 36B

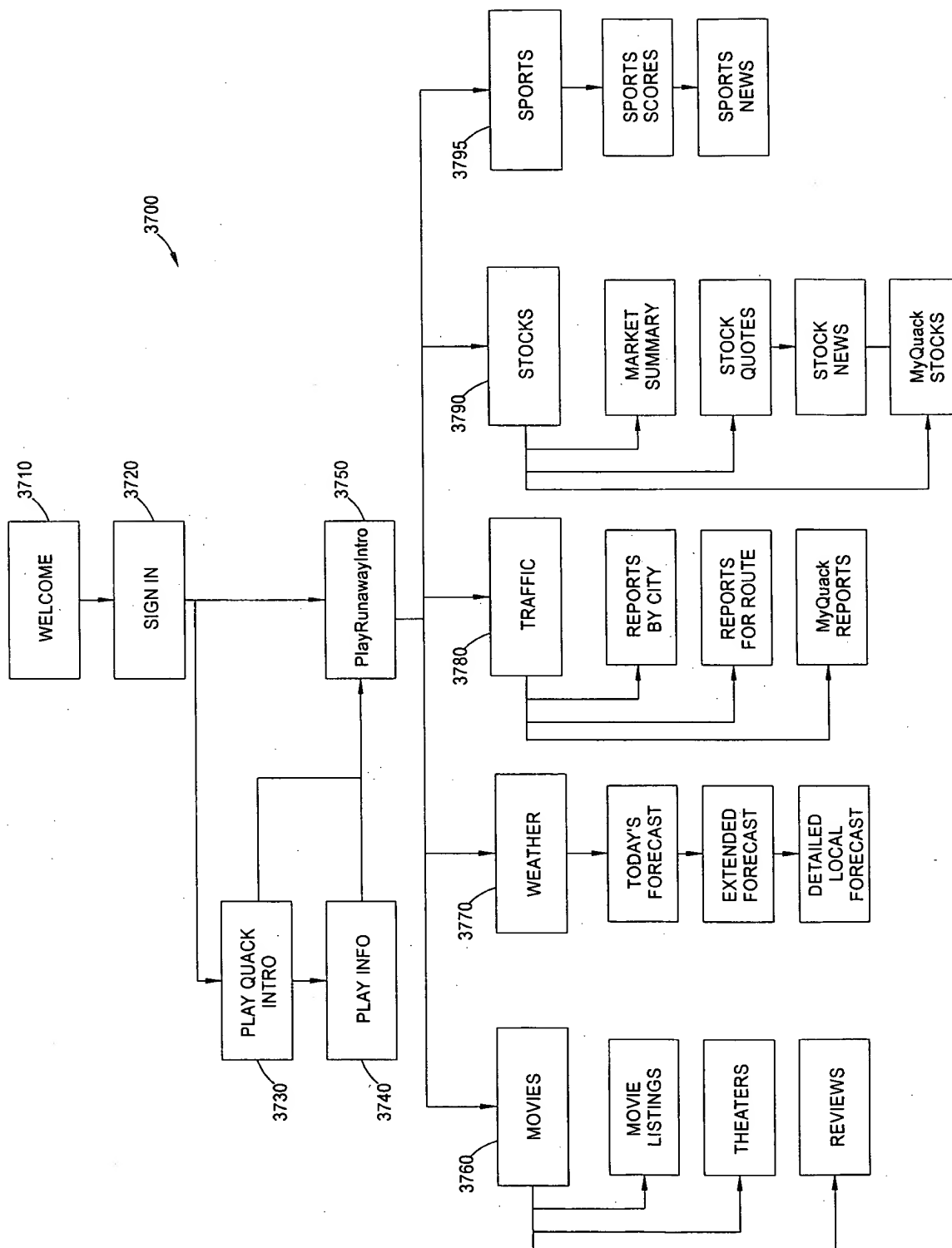


FIG. 37

094951-01560

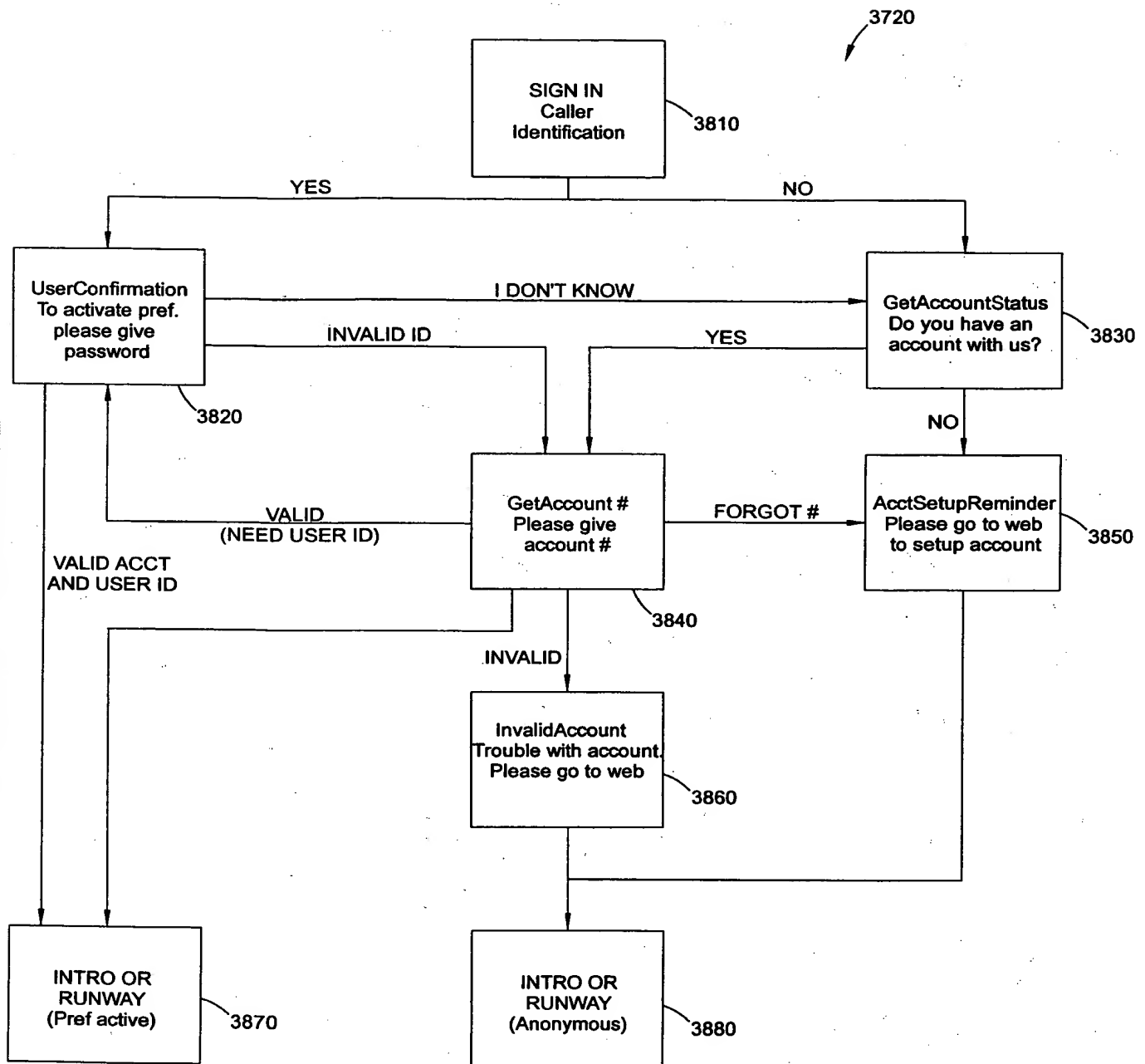


FIG. 38

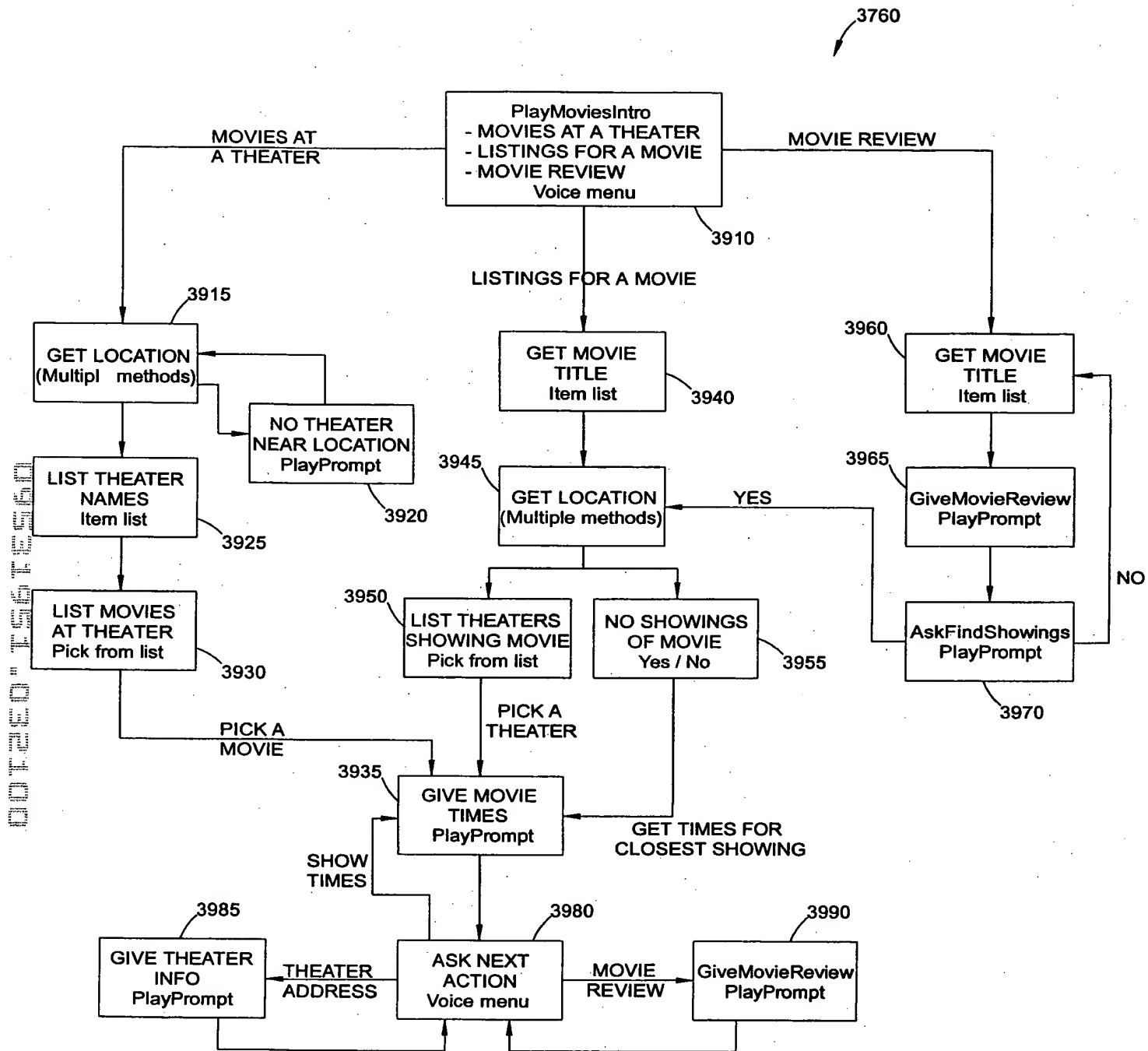


FIG. 39

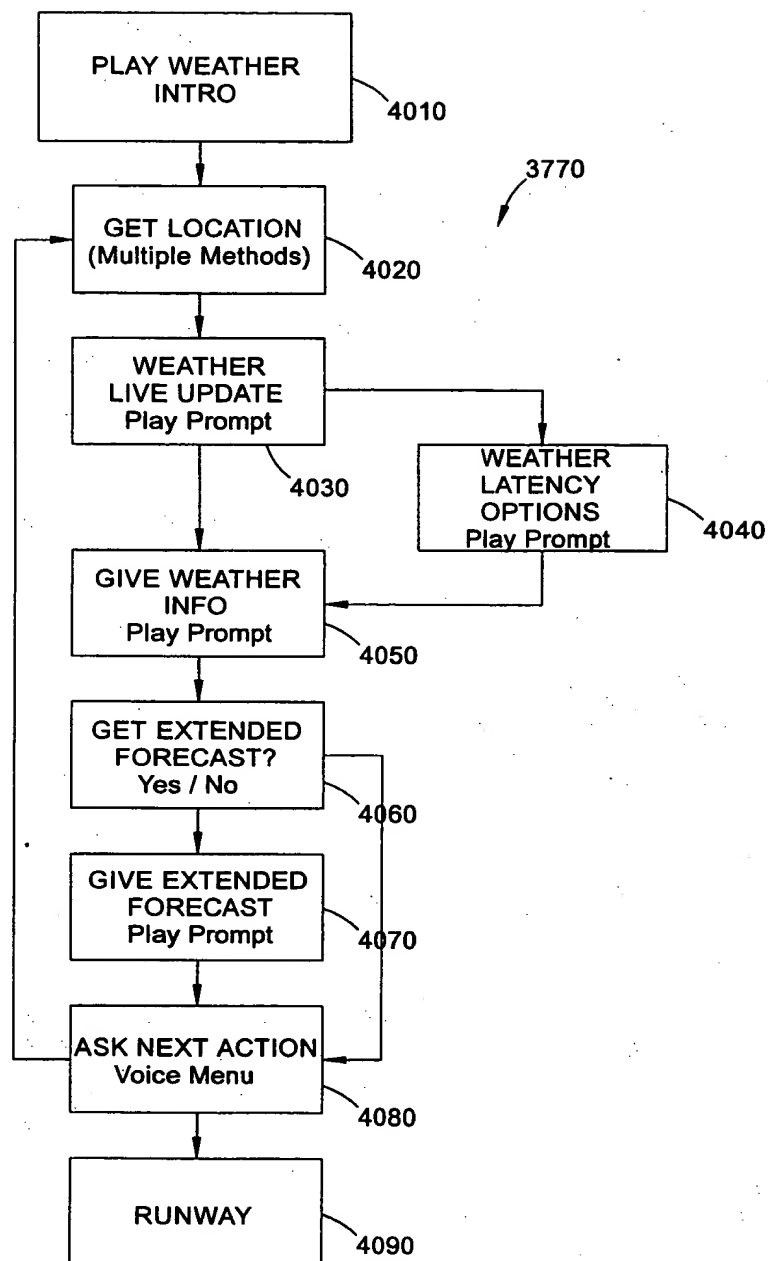
[illegible]

FIG. 40

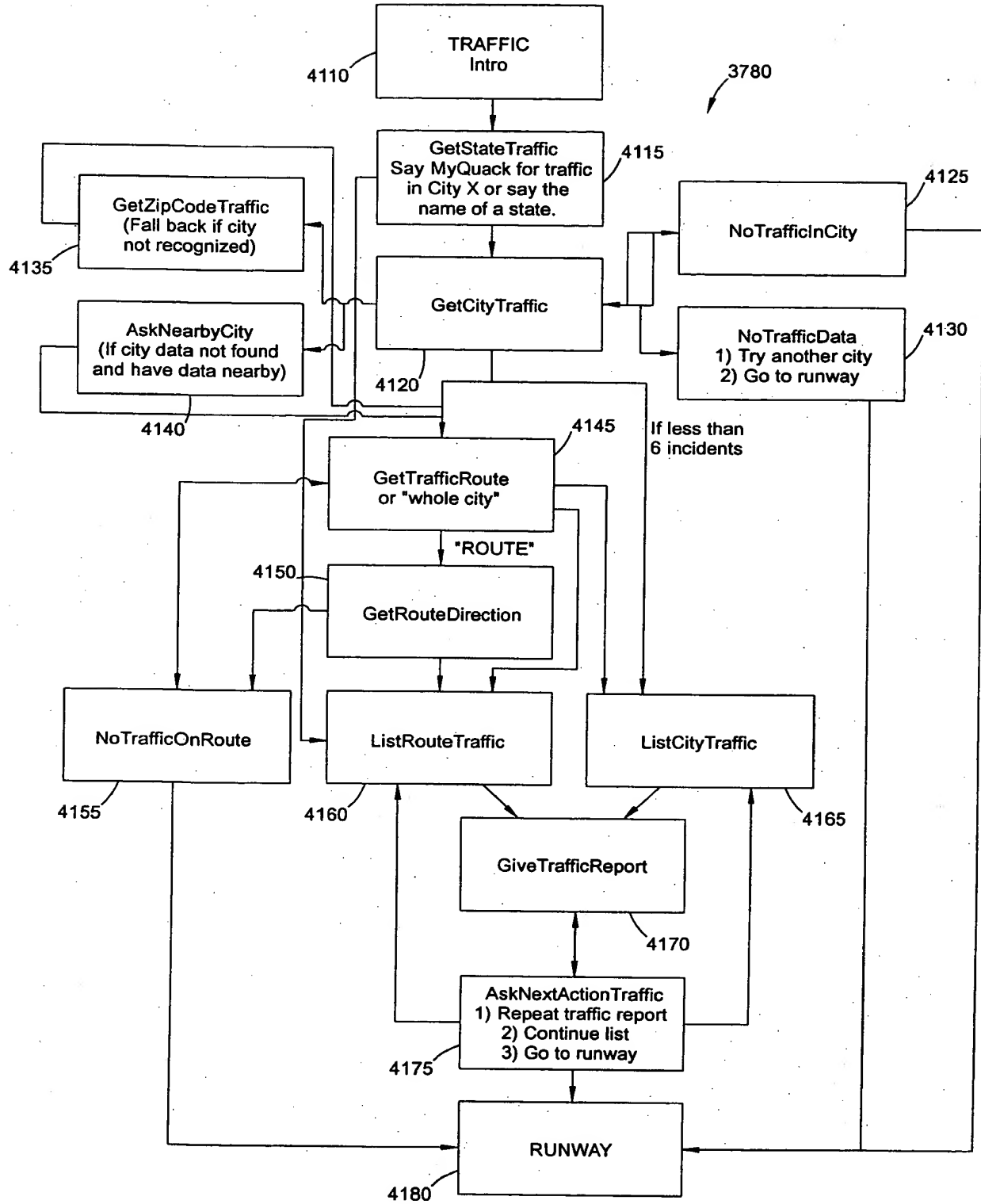


FIG. 41

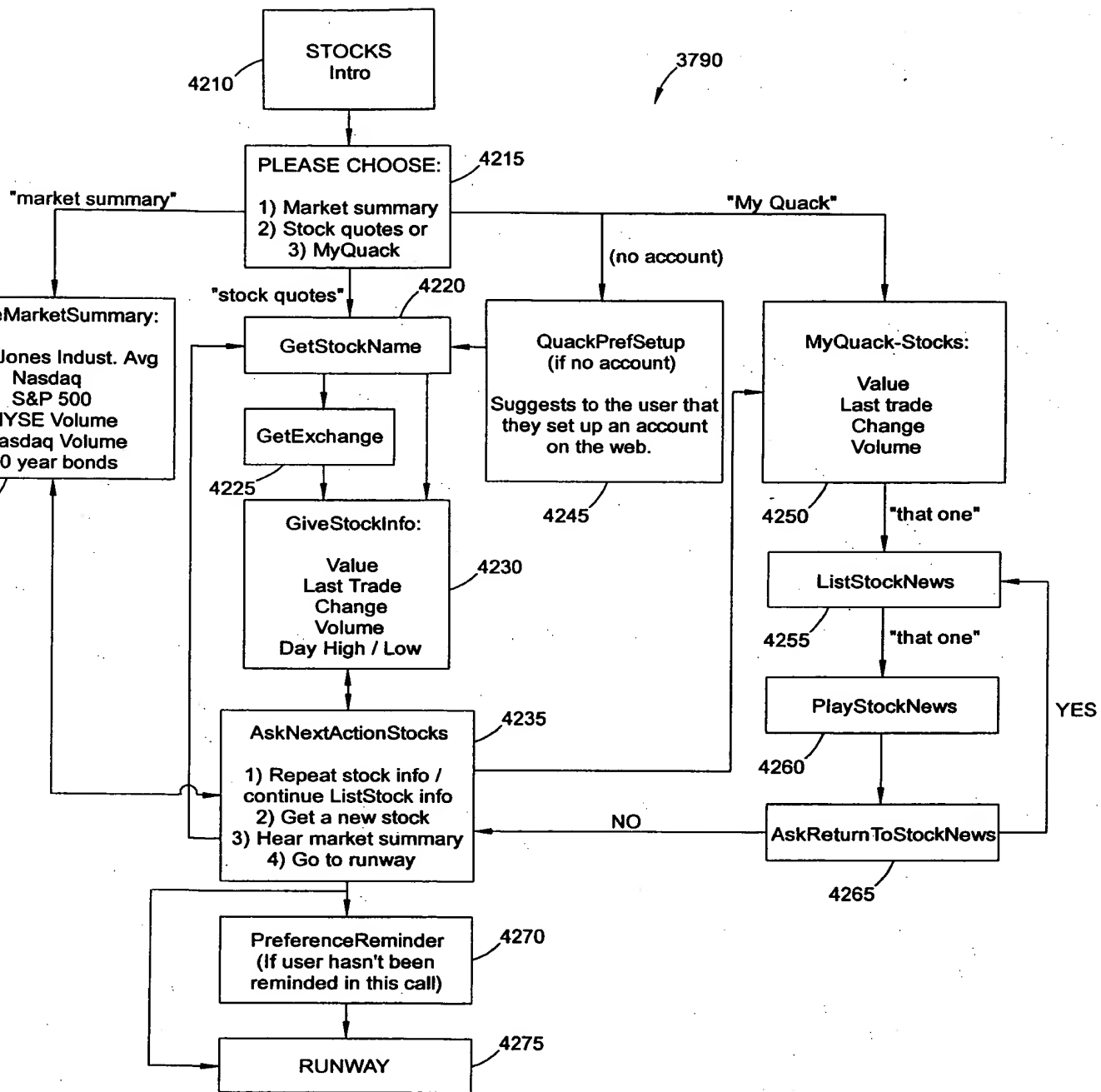


FIG. 42

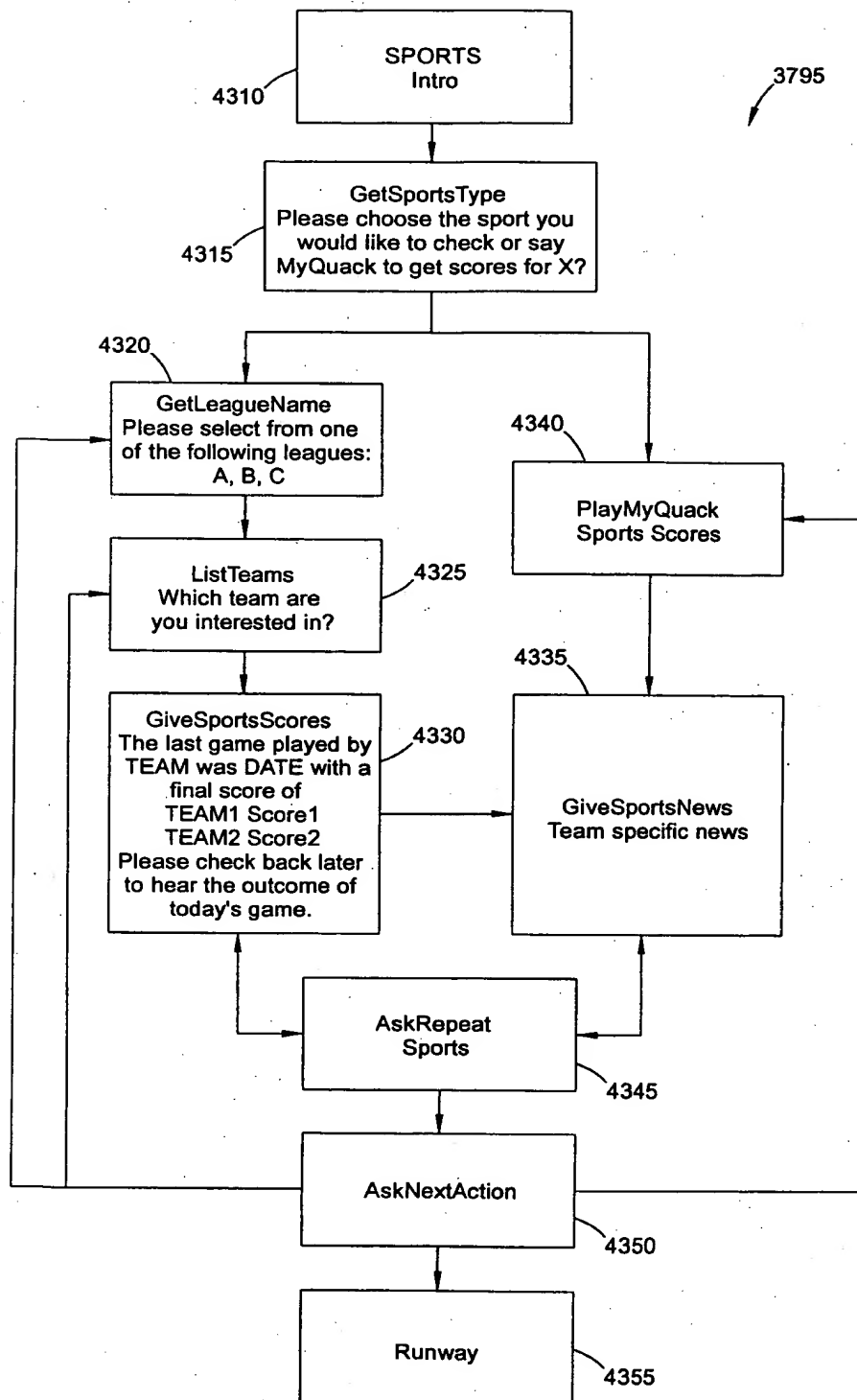


FIG. 43